

6.0 Cumulative Impacts

6.1 Introduction

CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Section 15355 further states that cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the State CEQA Guidelines requires a discussion of cumulative impacts of a project “when the project’s incremental effect is cumulatively considerable.” Cumulatively considerable, as defined in Section 15065(a)(3), “means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

According to Section 15130(b) of the State CEQA Guidelines, the discussion of cumulative effects “...need not provide as great a detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness...” The evaluation of cumulative impacts is to be based on either (A) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency,” or (B) “a summary of projections contained in an adopted local, regional, or statewide plan or related planning document, that describes or evaluates conditions contributing to the cumulative effect...Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency” (CEQA Guidelines Section 15130(b)(1)).

Pursuant to Section 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans, which may be incorporated by reference. In addition, no further cumulative impact analysis is required when a project is consistent with such plans, and the Lead Agency determines that the regional or area- wide cumulative impacts of the proposed project have already been adequately addressed in a certified EIR for that plan. In addition, Section 15130(e) states that “if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact as provided in Section 15183(j).”

This cumulative impacts analysis relies primarily on the cumulative impact analysis of the General Plan PEIR, which concluded that implementation of the General Plan would result in significant and unmitigable cumulative impacts to the following environmental issue areas:

agricultural resources, air quality, biological resources, geologic resources, health and safety, historical resources, hydrologic resources, land use, mineral resources, noise, paleontological resources, population and housing, public facilities, public services and utilities, transportation/traffic/circulation/parking, visual effects and community character, water quality and global warming.

6.2 Cumulative Analysis Setting and Methodology

A broad examination of cumulative impacts involves considering the CPU together with growth of the City and the region. Development pursuant to the General Plan would occur in accordance with the land use designations and development intensities identified in the Land Use and Community Planning Element. The land uses and the associated potential development designated in the General Plan correlate to regional growth estimates made by SANDAG. SANDAG estimates anticipated growth for the 18 cities and the unincorporated areas within San Diego County for the purpose of allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth.

Section 5 of the PEIR for the City's General Plan discusses the cumulative impacts that result from its implementation and is therefore, incorporated by reference. The analysis in the General Plan PEIR relied on the regional growth projections provided by the SANDAG *2030 Regional Growth Forecast Update* (Regional Growth Forecast) estimates for employment, population, and housing for the period between 2004 and 2030. Cumulative impacts were analyzed in light of the significance thresholds presented in Sections 3.1 through 3.17 of the General Plan PEIR, with the exception of global warming impacts, which were discussed separately in Section 6.2.

Cumulative impacts would occur as a result of multiple projects developed by 2030. The General Plan strategy anticipated the cumulative effects of growth and planned for it in a manner that would be balanced in its approach. The focused growth strategy addresses future growth as a whole, and includes policies to avoid or reduce impacts on a cumulative basis.

6.2.1 Plans and Programs Evaluated for Cumulative Impacts

The City of San Diego General Plan; the City of San Diego MSCP Subarea Plan and Draft Vernal Pool HCP; the City of San Diego Land Development Code, and the SANDAG RCP were used to evaluate cumulative impacts and are briefly described below. These documents are on file at the City of San Diego Development Services Department, 1222 First Avenue, San Diego, California 92101. A summary of anticipated significant impacts identified for the plans evaluated is included in Table 6-1.

**TABLE 6-1
PLANS AND PROGRAMS USED FOR CUMULATIVE ANALYSIS**

Map Number	Project	Project Location	CEQA Document (as of August 2013)	Significant Impacts by Resource Issue Area
1	City of San Diego General Plan	City of San Diego	Final EIR certified and plan adopted in March 2008	(1) agricultural resources; (2) air quality; (3) biological resources; (4) geologic conditions; (5) health and safety; (6) historical resources; (7) hydrology; (8) land use; (9) mineral resources; (10) noise; (11) paleontological resources; (12) population and housing; (13) public facilities; (14) public utilities; (15) traffic; (16) visual effects/neighborhood character; (17) water quality; (18) global warming
2	City of San Diego MSCP Subarea Plan	City of San Diego	Final EIR certified and plan adopted in March 1997	land use, biology
3	SANDAG RCP	San Diego region	Final EIR certified and plan adopted in July 2004	land use, population/housing, visual resources, transportation/circulation, air quality, noise, energy, geology/ paleontology, hydrology/water resources, biological resources, cultural resources, and public services/utility systems.
4	City of San Diego Land Development Code	City of San Diego	Final EIR certified and adopted in 1999	Land use, biological resources, landform alteration, historical resources, paleontological resources, human health and public safety; cumulative: soils/ erosion hazard, air quality, hydrology/water quality, biological resources, land use, transportation/circulation, landform alteration, historical resources and paleontological resources.

6.2.1.1 City of San Diego General Plan

A comprehensive update of the City's General Plan (March 10, 2008) is based on a new planning strategy for the City developed in 2002. The Strategic Framework Plan describes the role and purpose of the General Plan, outlines the City of Villages strategy, presents ten Guiding Principles that helped to shape the General Plan, summarizes the plan's elements, and discusses how implementation would occur.

Under the City of Villages strategy, the General Plan aims to direct new development away from natural undeveloped lands into already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. It is a development strategy that mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development in areas with available public infrastructure.

6.2.1.2 City of San Diego MSCP Subarea Plan and Draft Vernal Pool HCP

The City of San Diego's MSCP Subarea Plan was approved in March 1997, and provides a process for the issuance of ITPs under the federal and state Endangered Species Act and the California NCCP Act. The primary goal of the City's MSCP Subarea Plan is to conserve viable populations of sensitive species and regional biodiversity while allowing for reasonable economic growth. To carry out this goal, the City's MSCP Subarea Plan establishes an area in which a permanent MSCP preserve, known as the MHPA, is assembled. Development or other discretionary actions are allowed a 25 percent encroachment into the least environmentally sensitive portion of the property.

The City's MSCP Subarea Plan additionally provides MHPA Land Use Adjacency Guidelines, which aim to avoid or reduce significant indirect impacts from adjacent uses. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/development and are intended to be addressed on a project-by-project basis either in the planning or management stage. New development located adjacent to the MHPA would be required to incorporate measures for reducing potential indirect impacts through implementation of all applicable Land Use Adjacency Guidelines as outlined in the MSCP Subarea Plan.

Additionally, as of the writing of this PEIR, the City is in the process of developing a draft Vernal Pool HCP. The draft HCP is envisioned as a comprehensive planning approach to preserve vernal pool species and their habitat within the City's jurisdiction. The HCP would create a new preserve boundary and updated conditions of coverage for sensitive species, including San Diego and Riverside fairy shrimp, San Diego button celery, spreading navarretia, California orcutt grass, San Diego mesa mint, and Otay mesa mint.

6.2.1.3 SANDAG RCP

The RCP (2004) is the long-range planning document developed by SANDAG to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The RCP establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." The RCP encourages cities and the County to increase residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. Basic smart growth principles are designed to strengthen land use and transportation integration through an emphasis on pedestrian-friendly design and mixed-use development.

The RCP also addresses border issues, providing an important guideline for communities that have borders with Mexico. In this case, the goal is to create a regional community where San Diego, its neighboring counties, tribal governments, and northern Baja California mutually benefit from San Diego's varied resources and international location.

6.2.1.4 City of San Diego Land Development Code

Chapters 11 through 15 of the City's Municipal Code (MC) are referred to as the Land Development Code (LDC). The LDC consolidates all development regulations into a sequence of four chapters of the MC consisting of citywide base zones, overlay zones and the planned district ordinances, as well as other requirements to guide development such as the steps for processing development permits, noticing, public hearings and decision-making processes, definitions and rules for calculations and measurements, LDC defined terms, enforcement, use regulations and permit types, as well as procedures for implementation of CEQA and the State CEQA Guidelines. The LDC also includes the ESL and Historical Resources Regulations, as well as the Brush Management Regulations, Landscape Standards and the Stormwater Standards, and the Land Development Manual which includes guidelines for preparing technical reports used to evaluate development projects.

6.3 Cumulative Effects Analysis

6.3.1 Land Use

The General Plan PEIR concluded that the gradual development of this region would result in significant, unavoidable cumulative land use impacts. Certification of the General Plan PEIR included the adoption of mitigation measures that provide strategies for future development proposals in an attempt to reduce significant land use impacts from future projects.

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The assessment of cumulative land use impacts also relies on the SANDAG RCP, as well as the City of San Diego's MSCP Subarea Plan, Draft Vernal Pool HCP and the Land Development Code. One of the overriding land use goals in the RCP is to promote locating future development near existing and planned urban infrastructure, including transit. The MSCP Subarea Plan was prepared in order to meet the requirements of the California Natural Communities Conservation Planning Act (NCCP) of 1992 and forms the basis of the Implementing Agreement which is a contract between the City and the wildlife agencies to ensure implementation of the plan and allows the City to issue take permits at the local level. The MHPA was also developed by the City in cooperation with the wildlife agencies, property owners, developer and environmental groups and delineates the core biological resource areas and corridors targeted for conservation. Limited development is allowed in the MHPA and is further defined in the MSCP Subarea Plan and the ESL Regulations of the LDC.

As discussed in Section 5.1, Land Use, the CPU contains nine elements, each providing community-specific goals, policies, and recommendations. These are consistent with citywide zoning classifications, development design guidelines, other mobility and public realm guidelines, incentives, and programs in accordance with the general goals stated in the City's General Plan. The CPU includes the application of existing, new, or modified zoning, which is consistent with the General Plan goals and policies; therefore, community buildout resulting from development proposals would be consistent with community goals and character.

The CPU's land use plan includes two village opportunity areas that would help to minimize the potential impacts associated with growth. The CPU implements the General Plan by integrating housing in proximity to employment, within pedestrian-friendly, mixed-use village centers located along transit corridors. This occurs in the western portion of the CPU area. The eastern portion of the CPU area preserves Prime Industrial Lands allowing growth of industry and international business opportunities. Incorporation of these concepts would result in the accommodation of population growth primarily within compact village centers, along with the maintenance and development of industrial, business and international trade. The proposed CPU would contribute to an overall increase in density and intensity of uses within the CPU area. The City's General Plan anticipated the cumulative effects, associated with denser, mixed-use villages and created specific design and planning standards, which are mirrored in the proposed CPU. The CPU would not result in direct or cumulative impacts associated with Land Use Plan Conflicts or Land Use Compatibility.

As discussed in Section 5.1.5, development under the CPU would not result in conflicts with the City's ESL or HRR. The City's process for the evaluation of discretionary projects includes environmental review pursuant to CEQA, as well as analysis of those projects for consistency with the goals, policies and recommendations of both the General and Community Plan. Implementation of General Plan and CPU policies and compliance with federal, state, and local regulations at the project-level would preclude adverse physical changes to the environment associated with land use impacts. The CPU includes specific

submittal requirements for future projects implemented in accordance with CPIOZ Type A with respect to biological and historical resources. Those projects that can demonstrate that no resources are present would not be subject to further evaluation under CEQA. However, for some projects it is possible that resources would be present and subject to discretionary review under CPIOZ Type B and therefore, subject to CEQA.

MHPA boundary adjustment(s) may be proposed as part of future development within the CPU area. The City's MSCP allows for adjustments to the MHPA boundary without the need to amend the MSCP Subarea Plan, provided the boundary adjustment results in an area of equivalent or higher biological value. Six functional equivalency criteria in accordance with the Final MSCP Plan, Section 5.4.2 must be prepared as part of the MHPA boundary adjustment equivalency analysis. Any MHPA boundary adjustments would require concurrence from the Wildlife Agencies. Any MHPA boundary adjustments and functional equivalency analysis would be addressed at the time future development proposals are brought forward pursuant to the adopted CPU. Potential impacts to MHPA preserve configuration as a result of MHPA boundary adjustments would not be considered significant, because the adjustment must meet the required MHPA equivalency analysis criteria and obtain approval from the Wildlife Agencies. Potential impacts to sensitive vegetation and species would be analyzed and mitigated consistent with mitigation measures BIO-1 (uplands) and BIO-4 (wetlands).

6.3.2 Visual Effects and Neighborhood Character

This cumulative assessment of visual impacts relies on the General Plan PEIR. The cumulative study area included in the General Plan EIR was the entire San Diego County region and consisted of significant landscape features and landforms. The General Plan PEIR concluded that the gradual development of this region would result in cumulatively significant aesthetic impacts and included mitigation measures that provide strategies for future development proposals to apply in an attempt to reduce significant visual impacts.

Future growth pursuant to adopted plans in the region including the CPU, does not have the potential to result in a cumulative visual impact. Although adoption of the CPU would contribute to the increased urbanization in the subregion; the extent of adverse effects on visual character would be reduced through implementation of CPU policies addressing design and location of future buildings and inclusion of open-space, neighborhood parks, etc. Changes in visual character and quality resulting from future development within the CPU area would contribute incrementally to cumulative impacts; however, this would be an improvement with regards to aesthetics because development would occur where no development currently exists.

The CPU Urban Design Element contains goals and policies to ensure that development within the CPU area would not result in architecture, urban design, landscaping, or landforms that would negatively affect the visual quality of the area or strongly contrast with

the surrounding development or natural topography through excessive bulk, signage, or architectural projection. The design controls placed on subsequent development would ensure that development occurs in accordance with the CPU's goals, policies and design objectives. Therefore, the CPU's incremental contribution to visual impacts would not be cumulatively considerable.

6.3.3 Air Quality/Odor

While air quality in the SDAB has generally improved over recent decades due to auto emissions and other emissions restrictions and improved technologies, the SDAB is currently in non-attainment for federal and state ozone standards and state PM₁₀ and PM_{2.5}, and is unclassifiable for the federal PM₁₀ standard. Past development has contributed to this condition and future development forecasted for the region would generate increased air pollution emissions associated with construction activities, transportation, and stationary sources, which could exceed regional air quality standards. Construction activities in particular would result in emissions of PM₁₀ and PM_{2.5}. In addition, the increased volume of traffic generated by new development would increase localized concentrations of CO₂. While it is not anticipated that construction activities throughout the CPU area would occur simultaneously, there is no way to determine a precise construction schedule at this program-level or whether construction activities within the CPU area would occur concurrently with projects in adjacent areas. Because the air basin is in non-attainment for ozone, PM₁₀ and PM_{2.5}, any potential increase in emissions of these criteria pollutants resulting from future development would pose potential cumulatively considerable and significant air quality effects.

The cumulative assessment of air quality impacts to the SDAB relies on assessment of CPU project consistency with the adopted RAQS and SIP. The RAQS and SIP are based on growth forecasts for the region, which are in turn based on maximum buildout of land uses as allowed in the adopted community and general plans. Potential cumulative air quality impacts would thus be reduced through achievement of emission levels and reduction strategies identified in the RAQS. With regard to ozone precursors ROG_s and NO_x, in general, if a project is consistent with the general plan land use designations and intensity, it has been accounted for in the ozone and other criteria pollutant and TAC attainment demonstrations contained within the SIP, and would not result in a cumulatively considerable ambient air quality impact. In this case, the most recent RAQS/SIP is based on the adopted community plan. As discussed in Section 5.3, Air Quality, area and mobile emissions under the proposed CPU would be less than area and mobile emissions under the adopted community plan for all criteria pollutants. Therefore, the proposed CPU is consistent with the SIP and RAQS and would not result in a cumulatively considerable ambient air quality impact. However, as further discussed in Section 5.3 Air Quality, buildout of the CPU would result in increased construction and operational emissions as well as the generation of air pollutants associated with planned industrial uses (stationary sources) and exposure of toxic

air emissions to sensitive receptors resulting from collocation, and would therefore result in a significant cumulative air quality impact.

Although future development proposals within the CPU area would be required to evaluate and mitigate potentially significant project-level impacts, no feasible mitigation measures are available at this program-level. Therefore, air quality impacts associated with buildout of the CPU would be significant and cumulatively considerable.

6.3.4 Biological Resources

Preservation of the region's biological resources has been addressed through the implementation of regional habitat conservation plans. Impacts to biological resources in the City of San Diego, are managed through the adopted MSCP Subarea Plan which is incorporated by reference in the City's adopted General Plan.

As discussed in Section 5.4, Biological Resources, the CPU area currently supports a number of sensitive resources including riparian scrub, freshwater marsh, vernal pools, coastal sage scrub, native grassland, maritime succulent scrub, non-native grassland, and southern mixed chaparral. The distribution of these sensitive vegetation communities present in the CPU area are shown on Figures 5.4-3a-d. Likewise, there are 23 sensitive plant species and 28 sensitive wildlife species occurring or historically known to occur in the CPU area. The Dennerly and Spring canyons, connected by the Otay Mesa Road culvert, are major wildlife movement corridors within the CPU area. Additionally, the canyons along the Otay River Valley on the northern boundary of the CPU area provide for east-west wildlife movement.

The CPU incorporates several policies related to the protection of biological resources. These are detailed in Section 5.4.4.1 and focus primarily on the CPU's consistency with the City's ESL Regulations, the Biology Guidelines and MSCP Subarea Plan Management Policies to protect the area's sensitive plants and animals. This PEIR also includes a mitigation framework for future development implemented in accordance with the CPU.

Future commercial, business park and industrial development applications for properties that are subject to the CPIOZ and that are consistent with the CPU zone regulations, and the supplemental CPIOZ regulations, would be processed ministerially (CPIOZ Type A) in accordance with the procedures of the CPIOZ which requires preparation and submittal of a focused biological resources survey to determine presence or absence of sensitive plants and animal species. Future development proposal that do not comply with the supplemental regulations for CPIOZ Type A and the regulations of the underlying zone would apply for a CPIOZ Type B permit and would be required to obtain discretionary approval through a Site Development Permit. Implementation of the CPIOZ would ensure consistency of all future development with CPU goals and policies. Although implementation of the CPU has the potential to result in significant direct and indirect impacts to sensitive plant and animal

species which can be mitigated at the project-level, these projects would be required to implement the Mitigation Framework identified in the MMRP which requires site-specific environmental review, analysis of potential impacts to biological resources, and recommendations for mitigation to reduce significant project-level biological resource impacts to below a level of significance. Although each individual future project implemented in accordance with the CPU would contribute to incremental biological resource impacts, compliance with adopted CPU policies, the MSCP Subarea Plan, ESL Regulations, the Biology Guidelines and strict adherence to the Mitigation Framework would ensure that impacts from future development would not be cumulatively significant.

6.3.5 Historical Resources

The General Plan PEIR stated that the continued pressure to develop or redevelop areas would result in incremental impacts to the historic record in the San Diego region, which was determined to be a cumulatively significant impact. Regardless of the efforts to avoid impacts to historical resources, the more that land is redeveloped, the greater the potential for impacts to historical resources. Furthermore, the General Plan, RCP and LDC EIR's concluded that the loss of historical resources in the region would be cumulatively significant.

The Historic Preservation Element of the CPU includes specific policies addressing the history and historical resources unique to the CPU area in order to encourage appreciation of the community's history and culture. As discussed in Section 5.5, Historical Resources, the CPU would result in direct impacts to historical resources. The goals, policies, and recommendations enacted by the City, combined with the federal, state, and local regulations described in Section 5.5, provide a framework for developing project-level mitigation measures for future discretionary projects.

Future commercial, business park and industrial development applications for properties that are subject to the CPIOZ and that are consistent with the CPU zone regulations, and the supplemental CPIOZ regulations, would be processed ministerially (CPIOZ Type A) in accordance with the procedures of the CPIOZ which requires preparation and submittal of a archaeological survey to determine presence or absence of resources within a project site. Future development proposal that do not comply with the supplemental regulations for CPIOZ Type A and the regulations of the underlying zone would apply for a CPIOZ Type B permit and would be required to obtain discretionary approval through a Site Development Permit. Implementation of the CPIOZ would ensure consistency of all future development with CPU goals and policies. These policies and regulations are designed to reduce impacts to historical resources to below a level of significance.

There are no impacts associated with the historical built-environment, and therefore, they are not considered in the cumulative analysis. Potential impacts to Historical Resources (Archaeology) are individually significant and when taken into consideration with other past

projects, current projects and probable future projects in the CPU or region, do contribute to a cumulative impact; specifically with respect to non-renewable resources. However, with implementation of the Mitigation Framework detailed in the PEIR, information associated with these resources from project-level analysis would be collected, catalogued and included in technical reports available to researchers for use on future projects, thereby reducing the cumulative impact to below a level of significance.

6.3.6 Human Health/Public Safety/Hazardous Materials

The cumulative assessment of impacts to human health/public safety/hazardous materials relies in part on the General Plan PEIR and the Hazardous Materials Technical Study (HMTS) prepared for the CPU. The General Plan PEIR concludes that the population growth occurring during implementation of the General Plan would result in an incremental increase in the number of people exposed to hazards. The General Plan PEIR includes the adoption of mitigation measures that provide strategies for future development proposals to reduce significant impacts to human health and safety. However, because the degree of future impacts and applicability, feasibility, and success of future mitigation measures would not be adequately known at the program-level, the General Plan PEIR concluded that there would be a cumulatively significant impact to human health and safety.

Projected population growth associated with the CPU would increase the number of people potentially exposed to hazards associated with wildfires. As discussed in Section 5.6, Human Health/Public Safety/Hazardous Materials, City regulations, as well as General Plan and CPU policies, would help reduce, but not completely abate, the potential risks of wildland fires, and subsequent review of development proposals implemented in accordance with the CPU would likely result in a reduction of impacts through design measures focused on fire safety. However, for some projects, it is possible that adherence to regulations may not adequately avoid or reduce incremental urban and wildland fire impacts, and such projects would require additional measures.

The CPU would introduce additional residents and businesses within the AIA for Brown Field. Future development pursuant to the CPU would require consistency with the adopted ALUCP. Therefore, implementation of the CPU would not result in a cumulative impact associated with aircraft hazards.

As further discussed in Section 5.6, Human Health/Public Safety/Hazardous Materials, a total of six sites associated with County's DEH site assessment and mitigation cases were identified within the CPU area. The CPU includes new uses near existing industrial development or existing properties of environmental concern, as well as industrial and commercial land use designations that would allow certain business and industrial operations to generate, transport, or temporarily store hazardous waste within the vicinity of residential uses. The addition of trucks serving local businesses would also expose an increased number of residents to hazards associated with the release of hazardous

materials that are being transported through the CPU area. As future projects are submitted for review, site-specific studies will be required to determine the potential for impacts resulting from new development or redevelopment of existing sites, which have been identified on local, state or federal lists related to hazardous materials. Future project applicants would be required to consult with and obtain clearance from the County's DEH before projects would be recommended for approval (either ministerial or discretionary). Compliance with existing local, state, and federal regulations, General Plan and CPU policies and the Mitigation Framework identified in Section 5.6, would ensure that no direct or cumulative impacts related to Human Health/Public Safety/Hazardous Materials would result from implementation of the CPU.

6.3.7 Hydrology/Water Quality

Implementation of the CPU through the construction and operation of future projects could result in significant impacts on drainage patterns, water quality, flooding, and groundwater, and an increase in stormwater runoff within the study area.

Future projects within the CPU area would be required to comply with all NPDES permit requirements, including the development of an SWPPP if the disturbed area covers 1 acre or more or a Water Quality Control Plan if the disturbed area is less than 1 acre; utilize/follow the City's Storm Water Standards Manual for drainage design and BMPs for treatment. In addition, adherence to the San Diego RWQCB NPDES requirements and the San Diego Bay and Tijuana River WURMP would help ensure operational compliance of future projects within the CPU area.

However, minimization of a direct impact does not necessarily guarantee that no additional cumulative impacts would occur. The potential exists that implementation of future development in the study area could have a cumulative impact on hydrology and water quality of the watersheds, including downstream problems with flooding, sizing of drainage facilities, erosion and sedimentation that is not avoided through implementation of local, federal and state regulations that require the implementation of storm water control facilities and BMPs.

Pursuant to the City's Storm Water Standards, future development would be required to implement construction, post-construction, and permanent BMPs in addition to hydromodification management to minimize water quality impacts both during the construction and operation phases. Future development projects would be required to enter into a Storm Water Management and Discharge Control Maintenance Agreement with the City to ensure the maintenance of the permanent BMPs. Future development would also be required to implement these mandated water quality protection measures and, through adherence to the City's NPDES permit, Standard Urban Stormwater Management Plan, and Stormwater Standards Manual, would prepare project-specific SWPPPs and implement

practices that would preclude significant water quality impacts. Implementation of these requirements would avoid potentially significant cumulative impacts.

The CPU contains goals and policies related to the provision of a reliable system of stormwater facilities to serve the existing and future needs of the community and as a means to minimize urban runoff and pollution. Because the CPU includes measures intended to minimize impacts to hydrology and water quality and future development would be required to adhere to the local, state and federal regulations, related to water quality, implementation of the Mitigation Framework provided in Section 5.7, Hydrology and Water Quality, including the requirement for all subsequent projects to prepare SWPPPs and Storm Water Mitigation Plans in accordance with local and state regulations would preclude the potential for cumulative impacts.

6.3.8 Geology/Soils

The General Plan PEIR concluded that projected population growth in the county and in the CPU area would increase the number of people potentially exposed to seismic and geologic hazards, specifically within the western and southern edges of the CPU that are identified as moderate to high geotechnical and relative risk area. Erosion rates would be accelerated by earthwork for new construction during buildout of the CPU. However, such impacts are site-specific and do not compound or increase in combination with projected development elsewhere in the county.

As discussed in Section 5.8, Geology/Soils, potential impacts to future development would be addressed through project-level analysis and the application of remedial measures identified in site-specific geotechnical investigations (when applicable), along with the mitigation framework specified in Section 5.8 of this PEIR. Additionally, adherence to the City's Grading Ordinance and conformance to building construction standards for seismic safety with the California Building Code satisfactory to the City Engineer would assure potential impacts would be less than significant. Therefore, future development implemented in accordance with the CPU would not result in a cumulatively considerable impact.

6.3.9 Energy Conservation

The study area for the energy conservation cumulative effects analysis is defined as the San Diego region. The CPU is projected to result in an increase in both population and energy consumption as compared to existing conditions and would contribute to a citywide cumulative increase in demand for both electricity and natural gas.

At a minimum, future development implemented in accordance with the CPU area would be required to meet the mandatory energy standards of the current California energy code (Title 24 Building Energy Standards of the California Public Resources Code). Development would also be required to be in conformance with the General Plan and CPU policies, which

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identify sustainability and energy efficiency design standards, including: environmentally oriented site design (CPU 4.9-1), environmentally conscious building practices (CPU 4.9-2, 4.9-3), sustainable landscaping techniques (CPU 4.9-4), and low impact development principles (CPU 4.9-5).

The CPU would not result in the use of excessive amounts of fuel or other forms of energy during the construction of future projects under the CPU, and construction-related energy impacts would be less than significant. Implementation of the CPU is not anticipated to result in a need for new electrical systems or require substantial alteration of existing utilities, which would create physical impacts. Based on the program-level analysis of the CPU state and local mandates for energy conservation, and the energy reduction measures set forth in the CPU policies, impacts associated with energy use would be less than significant. Therefore, through adherence to energy policies contained within state regulations and the CPU, future development implemented in accordance with the CPU would not contribute to a cumulatively considerable increase in energy related impacts.

6.3.10 Noise

The City's General Plan PEIR concluded that as the region develops in response to projected population growth, future residential, commercial, industrial, transportation, and public facilities projects would not only result in short-term construction-related noise impacts, but the operation of these projects would cumulatively increase ambient noise levels in the county. All jurisdictions have existing ordinances that dictate periods of construction to avoid significant impacts, and no cumulatively considerable noise impacts would result from construction activities.

Cumulative noise impacts would generally be associated with improvements to major regional transportation corridors and stationary sources such as industrial land uses. Sensitive receptors within the noise impact zone of major transportation corridors and significant stationary sources of noise could be exposed to noise levels in excess of applicable standards as a result. Future development within both the CPU and adjacent areas would generate increased noise levels associated with both transportation and stationary sources, which could exceed City standards.

The Noise Element of the General Plan includes specific policies pertaining to compatible land uses, and the CPU Noise Element provides additional policies for noise attenuation pertaining to new uses that would help protect people living and working in the CPU area, especially within areas of residential–industrial interface from an excessive noise environment. The residential–industrial interface would allow for the collocation of noise sensitive uses (i.e., residential) adjacent to noise generating commercial and industrial uses resulting in a cumulative increase in exposure of people to excessive noise levels.

As discussed in Section 5.10.3.2, exterior noise levels at uses adjacent to I-805, SR-905, SR-125, Otay Mesa Road, and Airway Road would exceed applicable noise standards. The incremental exposure of sensitive receptors to increased vehicular noise levels along major transportation corridors and within the vicinity of new residences, when viewed in connection with the increased number of trucks, buses, and trains along these corridors and new stationary sources associated with development elsewhere in the City and surrounding jurisdictions, would be cumulatively considerable.

Compliance with the goals, policies, and recommendations of the General Plan and CPU, along with federal, state, and local regulations would, in general, preclude impacts related to the incremental exposure of sensitive receptors to increased ambient noise levels along major transportation corridors and within the vicinity of new stationary sources. However, with buildout of the CPU, there is the potential for exposure of sensitive receptors to increased noise related to roadways and stationary sources, such as commercial and industrial operations. The CPU therefore, would contribute to a cumulatively considerable noise impact.

6.3.11 Paleontological Resources

The General Plan PEIR concluded that impacts to paleontological resources, similar to historical resources, would be cumulatively significant. For each future discretionary project requiring mitigation, the General Plan PEIR identified site-specific measures detailed in the Mitigation Framework, which would reduce significant project-level paleontological resources impacts to less than significant.

As discussed in Section 5.11, Paleontological Resources, the majority of the CPU area overlies geologic formations assigned a high or moderate sensitivity rating. Based on the excavation activities associated with future development implemented in accordance with the CPU, there is a potential to impact subsurface paleontological resources. A Mitigation Framework consistent with the General Plan PEIR has been incorporated into this PEIR to reduce potential impacts to below a level of significance.

Future commercial, business park and industrial development applications for properties that are subject to the CPIOZ and that are consistent with the CPU zone regulations, and the supplemental CPIOZ regulations, and can demonstrate that no paleontological fossil resources are present on the project site; the project can be processed ministerially (CPIOZ Type A) and would not be subject to further environmental review under CEQA. Development proposals that do not comply with the CPIOZ Type A supplemental regulations shall be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Paleontological Resources. Implementation of the CPIOZ would ensure consistency of all future development with CPU goals and policies. These policies and regulations are designed to reduce impacts to paleontological resources to below a level of significance. Therefore, the incremental contribution of impacts from grading activities in

high and moderate fossil-bearing formations would not be considered cumulatively significant.

6.3.12 Traffic/Circulation

Because the CPU would not result directly in the development of new or expanded uses, the analysis of potential impacts to transportation/circulation detailed within Section 54.12 is conducted at a program-level and reflects potential cumulative (i.e., Horizon Year 2030) impacts.

The traffic analysis is based on the inclusion of SANDAG's Mobility 2030 Plan, identified improvements to the regional transportation system, and the understanding that the La Media Road bridge crossing the Otay River Valley would not be constructed, as it has already been removed from the City of Chula Vista Facilities Financing Plan. Additionally, the traffic analysis is based on the approval of proposed road classifications included as part of the CPU (see Table 5.12-5).

Traffic thresholds for the CPU are presented in Section 5.12.2. If the CPU exceeds these thresholds, then the CPU would be considered to have a significant cumulative impact. A significant cumulative impact would also occur if the CPU would cause the LOS to degrade from D to E, even if the allowable increases are not exceeded.

Implementation of the CPU would increase the number of intersections and road or freeway segments operating at LOS E or F within the CPU area. As shown in Tables 5.12-6 and 5.12-7, the CPU would result in unacceptable LOS E or F operations for 24 roadway segments, and 49 intersections. These would be considered significant cumulative impacts.

Also under the "Horizon Year Plus CPU" conditions, five segments of SR-905 would be expected to operate at unacceptable levels of service (see Table 5.12-8), and five ramp meter locations would also experience a downstream freeway operation of unacceptable LOS E or F (see Table 5.12-9). These failures would be considered significant cumulative impacts of the CPU.

At the program-level, impacts would be reduced through the CPU's proposed roadway classifications and identification of necessary roadway, intersection and freeway improvements. With proposed mitigation, 24 roadway segments, 39 intersections, five freeway segments, and five freeway ramp meter locations would operate at unacceptable levels of service. Mitigation or construction of these improvements would be carried out at the project-level by future development and with implementation of Public Facilities Financing transportation projects. Funding would be either through construction by individual projects, or through fair share contributions to be determined at the project-level, or through payment of Facilities Benefit Assessment fees. While some CPU circulation impacts would ultimately be reduced to less than significant through project-level mitigation, the CPU, in conjunction with other past, present or future projects, as identified in Section

5.12, would result in a significant cumulative impact. The CPU's contribution to the aforementioned impacts would be cumulatively considerable.

6.3.13 Public Services

The anticipated population growth within the CPU area would increase the demand for fire protection, police protection, schools, parks and recreation, and libraries. This demand, together with the demand from other development in the surrounding area, would result in a need for new or modified facilities. The construction of new or improved public services and facilities infrastructure could result in physical impacts to the environment.

The General Plan PEIR identified that a cumulatively significant impact exists relative to public services and facilities. Many agencies such as police and fire departments are party to agency sharing agreements in which agencies from one jurisdiction provide a public service to another jurisdiction under certain circumstances. In addition, some smaller school districts within the City serve students in other jurisdictions in the county. Therefore, impacts associated with the need for new or physically altered public services and facilities are cumulative in nature.

As discussed in Section 5.13, the City has planned for facilities that would adequately accommodate the projected growth of the CPU area. The construction of these facilities would most likely take place within the development footprint of the CPU and would be subject to independent environmental review at the time design plans are available. Consistent with the General Plan PEIR, for future discretionary projects requiring mitigation, site-specific measures would be identified to reduce significant project-level incremental impacts associated with new construction of, or improvements to, public services and facilities infrastructure to less than significant. In addition, concurrent with adoption of the CPU, the PFFP provides a mechanism to ensure that the need for public facilities identified in the land use plan are funded through payment of DIF or fair share contribution by future project implemented in accordance with the CPU. As such, the CPU would not contribute to a cumulative impact.

6.3.14 Utilities

6.3.14.1 Water

The City PUD and OWD are responsible for water supply distribution with the CPU area. The City PUD's Otay Mesa service area was evaluated and reviewed in the Otay Mesa Master Plan Optimization Baseline Report, which recommended backbone infrastructure improvements to the City's PUD system. The OWD's water system model was updated in October 2008 as part of the 2008 WRMP and again in November 2010, as part of the 2010 WRMP Update. The improvements identified above from the City's Baseline Report would be required regardless, and are not necessitated by implementation of the CPU. The

6.0 Cumulative Impacts

addition of pumping capacity to the Otay Mesa pump station, which is necessitated by the CPU, would occur at an existing facility and would not result in significant new environmental impacts. The OWD has not identified any infrastructure improvements that are necessitated by implementation of the CPU. Future development within the City PUD Otay Mesa service area and OWD service area could result in additional demand for reclaimed water. However, water distribution facilities would be expanded pursuant to the City PUD's Otay Mesa Master Plan and the OWD's 2010 WRMP; therefore, no cumulative impacts associated with water distribution facilities would result.

6.3.14.2 Wastewater

The City PUD is responsible for wastewater service within the CPU area. Wastewater service to the CPU area is currently provided through the Otay Mesa sewer collection system, the OVTS system, and Metropolitan Sewerage System (Metro). The study area considered for the sewer utility cumulative effects analysis is, therefore, defined as service areas for the Otay Mesa sewer collection system, the OVTS and Metro.

Growth associated with buildout of the CPU would increase wastewater flows by 1.33 mgd over buildout of the adopted community plan, for a total projected wastewater generation of 9.68 mgd. This increase would trigger the need for the construction of additional sewer infrastructure, including an increase in the sizing of sewer pipelines. The 2004 OMTS Sewer Master Plan and 2009 Refinement Report identified these improvements as potentially required in future phases to accommodate wastewater generation associated with buildout of the CPU area. The additional wastewater transmission improvements identified within the reports would occur within existing utility line easements and facilities, and therefore, would not result in significant new environmental impacts. Future development within the study area would be served by improvements identified within the Master Plan. No cumulative impacts associated with wastewater transmission infrastructure would result from the CPU.

6.3.14.3 Reclaimed Water

Recycled water service in the CPU area is planned to be provided by the OWD. Therefore, the cumulative study area relative to reclaimed water is OWD's service area, which encompasses the CPU area and Eastlake to the north. OWD's 2008 WRMP evaluated ultimate recycled water supply, storage, and pumping conditions, which would be required within the service area. The OWD's 2010 WRMP Update incorporated demands projected under the CPU, and did not identify additional storage or pumping deficiencies beyond improvements recommended in the 2008 WRMP. The improvements identified above from the OWD's 2008 and 2010 WRMPs would be required regardless and are not necessitated by implementation of the CPU. The OWD has not identified any reclaimed water infrastructure improvements that are necessitated by implementation of the CPU. Future development within the OWD service area could result in additional demand for reclaimed

water. Recycled water facilities would be expanded pursuant to the OWD's 2010 WRMP; therefore, no cumulative impacts associated with reclaimed water would result.

6.3.14.4 Solid Waste

Buildout of the CPU area would generate solid waste through both demolition and construction, along with ongoing operations of existing and future land uses within the CPU area. Waste generated from the CPU area would most likely be disposed of at the Otay Landfill, which has adequate capacity through 2021. Other disposal options include the Sycamore or Miramar landfills. All landfills within the San Diego region are approaching capacity and are due to close within the next three to 20 years. The application of the City's Recycling Ordinance, solid waste storage ordinance and the Construction and Demolition Debris Diversion Deposit Program, along with adherence to the policies in the General Plan and CPU would continue to reduce solid waste generation and increase recycling efforts. However, as indicated in Section 5.14, regulatory compliance alone would only allow for a 40 percent diversion rate at the program-level. In order to meet with State-mandated 75 percent diversion requirements, additional measures for waste reduction would need to be identified at the project-level. Therefore, buildout of the CPU would increase the amount of solid waste, resulting in a cumulative impact relative to solid waste capacity and collection.

Future development implemented in accordance with the CPU that meet the City threshold would be required to prepare and implement site-specific solid waste management plans, which include measures to supplement regulatory compliance, and reduce significant project-level solid waste impacts to below a level of significance. However, even with strict adherence to the CPU policies, regulatory compliance in the Municipal Code and implementation of the Mitigation Framework detailed in Section 5.14, the CPU's contribution to solid waste impacts would be cumulatively considerable.

6.3.15 Water Supply

The SDCWA 2010 UWMP identifies a diverse mix of water resources projected to be developed through 2030 to ensure long-term water supply reliability for the county, including the identification of alternative water supply sources to alleviate the risk of unforeseen water shortages. As discussed in Section 5.15, Water Supply, future water demands for the CPU area are accounted for in the SDCWA 2010 UWMP.

The CPU area is served by both the City PUD and the OWD. The WSAs prepared for the proposed CPU concluded that the CPU would be consistent with the water demands assumptions included in the regional water resource planning documents of the SDCWA and MWD. Furthermore, current and future water supplies, as well as the actions necessary to develop these supplies, have been identified in the water resources planning documents of the PUD, OWD, the SDCWA and MWD to serve the projected demands of the CPU area, in addition to existing and planned future water demand of the County. No cumulative impact

exists, and no cumulatively considerable impact would occur from implementation of the CPU.

6.3.16 Population and Housing

The study area considered for the population and housing cumulative impact analysis is defined as the region. The increase in housing supply proposed by the CPU would implement the housing goals of SANDAG's RCP and the General Plan Housing Element, not only in terms of quantity, but also diversity and location of residentially designated land. Buildout of the CPU area would contribute a projected maximum net increase of 6,374 dwelling units to the housing stock within the City and region. The increase in housing stock would accommodate the projected growth in population in the region and is consistent with the adopted General Plan and smart growth principles in that the higher residential density communities within the CPU area would be located close to transit, served by existing public infrastructure, and close to major urban amenities and jobs. Therefore, no significant cumulative impacts would result.

6.3.17 Agriculture/Mineral Resources

6.3.17.1 Agriculture

As discussed in Section 5.17, Agriculture/Mineral Resources, buildout of the CPU would convert 180 acres of Farmland of Statewide Importance as well as 28 acres of Unique Farmland to non-agricultural uses. In conjunction with buildout of other communities in the region, including development in the unincorporated areas, the CPU would result in a countywide loss of agricultural land, resulting in a significant cumulative impact.

Farmland within the CPU area is not contiguous and is currently surrounded by urban land uses and MHPA lands. Production associated with agricultural operations in the CPU area is not significant in terms of countywide agricultural value and agriculture is designated as interim use pending future development in the adopted Community Plan (1981). Of the 3,900 acres listed in the adopted Community Plan, 306 acres are currently still under agricultural production within the CPU area (SANDAG 2009). This represents only a tenth of one percent (0.1 percent) of the total acreage under cultivation within the county. A conversion of this amount would not be considered a significant agricultural loss. Because the CPU allows the interim use of the 306 acres currently under production, and because the loss of this acreage is not regionally significant to agricultural production, the loss would not be cumulatively considerable.

6.3.17.2 Mineral Resources

As discussed in the City's General Plan EIR, development associated with future population growth in San Diego County could result in adjacent incompatible land uses that impact the

extraction of mineral resources. Also, a balancing of implementation of General Plan goals and policies addressing habitat and open space preservation and mineral extraction may lead to the loss of access to significant mineral resources. In general, implementation of General Plan policies and compliance with federal, state, and local regulations would preclude mineral resources impacts.

As discussed in Section 5.17, Agriculture and Mineral Resources, “regionally significant” MRZ-2 aggregate resource areas exist within the northwest portion of the CPU area. While implementation of the CPU would result in the loss of mineral resources, it would not represent a loss of value to the region because this area is developed or planned to be developed as identified in the adopted 1981 Community Plan. Therefore, access to areas of significant aggregate within the CPU area are already restricted, which reduces the likelihood of extraction of those resources. Furthermore, the surrounding residential and commercial development in close proximity to this area would not be compatible with the extraction processes. When considering past, present, and future development in the region, implementation of the CPU would not result in a cumulatively considerable impact to mineral resources.

6.3.18 Greenhouse Gas Emissions

Greenhouse gas emissions are a cumulative concern on the global level and are generally regulated through state-wide legislation. For the purposes of the CPU, the study area for cumulative GHG emissions modeling is consistent with that of the traffic analysis. The boundary of the study area includes the CPU area and extends to those areas outside the CPU area, to roads that are common to other communities in the City of San Diego and other jurisdictions, such as the City of Chula Vista and the County of San Diego.

Section 5.18, Greenhouse Gas Emissions, provides a discussion of whether implementation of the CPU would generate GHG emissions, either directly or indirectly, that would have a significant cumulative impact on the environment. The section also analyzes the issue of whether the CPU’s GHG emissions, with incorporation of GHG-reducing regulations and design features, would achieve a 28.3 percent or greater reduction relative to the CPU’s BAU GHG emissions. Specific emission levels associated with vehicle use, energy use, area source emissions, water use, solid waste, and construction emissions are identified in Section 5.18.4.1a through 5.18.4.1h of the PEIR.

As shown in Table 5.18-6, the CPU GHG emissions, when compared to the BAU annual emissions, would result in an 11.4 percent reduction in GHG emissions relative to BAU. This falls short of meeting the City’s requirement to achieve a minimum 28.3 percent reduction in GHG emissions relative to BAU. The CPU Mobility, Urban Design, and Conservation elements include specific policies aimed at decreasing vehicle use and increase energy efficiency; however, these cannot be quantified in terms of their GHG emissions reductions at the program-level, and the GHG emissions generated from CPU buildout, in conjunction

6.0 Cumulative Impacts

without other local GHG emissions sources, would be cumulatively significant. While future development implemented in accordance with the CPU would be required to incorporate GHG emission reduction measures to the extent practicable, the CPU would fail to reduce its GHG emissions from BAU by a minimum of 28.3 percent, and therefore, the CPU's contribution to GHG emissions would be cumulatively considerable.

7.0 Growth Inducement

Pursuant to the 2012 CEQA Guidelines, an EIR shall “discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment...it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.” According to the City’s 2011 Significance Determination Thresholds Section 15126.2 (d), growth inducement:

is usually associated with those projects that foster economic or population growth, or the construction of additional housing, either directly or indirectly which may result in the construction of major and new infrastructure facilities. Also, a change in land use policy or projects that provide economic stimulus, such as industrial or commercial uses, may induce growth. Accelerated growth may further strain existing community facilities or encourage activities that could significantly affect the surrounding environment.

In addition, the Thresholds state that “the analysis must avoid speculation and focus on probable growth patterns or projects” (City of San Diego 2011d).

As previously discussed in Section 5.16, according to SANDAG, there were an estimated 15,323 residents in 2012 in the CPU area (SANDAG 2012b). By 2030, this population is projected to increase to 46,392; and to 65,368 by 2050 (SANDAG 2010b). Based on Government Code Section 65300, the General Plan serves as a comprehensive, long-term plan for physical development of the City and, by definition, is intended to manage and address future growth in the City. In accordance with the framework and policies in the City’s General Plan, future population growth would be accommodated primarily in existing urbanized areas or mixed-use villages.

The General Plan is based on the previously adopted City of Villages strategy. Under this strategy, a “village” is a place where residential, commercial, employment, and civic uses are present and integrated. The City of Villages strategy addresses the need for redevelopment, infill, and new growth in compact, mixed-use activity areas that are pedestrian-friendly, centers of community, and linked to the regional transit system. Implementation of the City of Villages strategy relies upon the future designation and development of village sites through comprehensive community plan updates. This strategy, as implemented through the General Plan goals and policies, is designed to provide a framework to manage and plan for future population growth in the City.

The CPU incorporates the City of Villages strategy by designating residential, village center and commercial, and most open space and park areas in the western portion of the CPU area. The community village concept draws upon the character and strength of the CPU’s

mixed-use settings and commercial centers. This western portion of the CPU area is planned to be comprised of vibrant pedestrian neighborhoods with enhanced connectivity. Additionally, CPU policies direct housing growth to areas suitable for residential use, buffered from industrial uses.

The CPU would also provide guidance for orderly growth and development in accordance with smart growth principles. Through the placement of higher density residential development in areas in and around transit and commercial corridors, the CPU would create mixed-use urban environments that support transit and pedestrian activity. A PFFP is being prepared concurrently with the CPU to allow for the maintenance and improvements in infrastructure capacity and public services to coincide with future development. Other potential environmental impacts associated with population growth in the CPU area (e.g., transportation/traffic, air quality, noise, GHG emissions) are addressed in the relevant sections of this PEIR.

SANDAG population projections prepared for the CPU area indicate that population would increase over time, regardless of whether the CPU is approved. As shown in Table 5.16-3, the CPU would result in an increase of approximately 6,374 residential dwelling units as compared to the adopted community plan and almost 14,500 additional units above existing. While planning for increased population growth within the CPU area, the Economic Prosperity Element of the CPU aims to maintain the vital role of the CPU area in the economic prosperity for the entire San Diego and U.S./Mexico border region due to activities generated at the Otay Mesa POE and additional base-sector industries. In order to accomplish this, the CPU includes land use planning principles, as well as goals and policies intended to protect, preserve, and expand the Prime Industrial Land designation in the eastern portion of the CPU area. Policies are intended to encourage the development of existing and emerging technology-based industries on these Prime Industrial Lands.

Overall, the CPU is growth accommodating, rather than growth inducing, because it provides comprehensive planning for the management of population growth and necessary economic expansion to support economic development efforts where none currently exist.

8.0 Effects Found Not to Be Significant

Pursuant to CEQA Guidelines Section 15128, based upon initial environmental review, the City determined that the CPU would have the potential to result in adverse effects on all environmental issue areas and called out as such in the Notice of Preparation distributed in 2010. While each of the environmental issue areas are further discussed in Chapter 5.0, Environmental Analysis of this PEIR, during the course of evaluating potential impacts and developing policies to be adopted with the CPU, the following issue areas were determined not to be significant and therefore, no mitigation would be required:

- Land Use (General Plan consistency & zoning, compatibility, Brush Management)
- Visual/Aesthetics (Public views, compatibility, landform alteration, unique features)
- Air Quality (Plan consistency, sensitive receptors/hot spot & particulate matter, odors)
- Energy Conservation
- Noise (Airport noise)
- Public Services
- Public Utilities (Communication systems)
- Energy Conservation
- Water Supply
- Agricultural/Mineral Resources

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9.0 Significant Unavoidable Environmental Effects/Irreversible Environmental Changes

9.1 Significant Environmental Effects Which Cannot Be Avoided if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2(b), any significant unavoidable impacts of a project, including those impacts that can be mitigated, but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in the PEIR. For the CPU, transportation/circulation, utilities (solid waste), air quality (consistency with RAQS, stationary sources and collocation), greenhouse gas emissions, and noise (traffic, stationary sources and construction) would remain significant and unavoidable effects of the CPU (refer to Section 5 of this PEIR for further detail). All other significant impacts identified in Section 5, Environmental Analysis, of this PEIR can be reduced to below a level of significance with implementation of the Mitigation Framework identified in Section 5 and in the Mitigation Monitoring and Reporting Program contained within Section 11 of this PEIR as well as through compliance with adopted General Plan and CPU policies.

9.2 Significant Irreversible Environmental Changes Which Would Be Caused by the Proposed Project Should It Be Implemented

Section 15126.2(c) of the CEQA Guidelines requires an evaluation of significant irreversible environmental changes which would occur should the CPU be implemented. Irreversible changes typically fall into three categories:

- Primary impacts such as the use of nonrenewable resources (i.e. biological habitat, agricultural land, mineral deposits, water bodies, energy resources and cultural resources);
- Secondary impacts such as highway improvements which provide access to previously inaccessible areas; and
- Environmental accidents potentially associated with the CPU.

9.0 Significant Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines states that irretrievable commitments of resources should be evaluated to assure that current consumption of such resources is justified.

Implementation of the CPU would not result in significant irreversible impacts to biological resources, agricultural land, mineral deposits, water bodies, energy resources or historical resources. Although sensitive biological resources are identified throughout the CPU area which would be impacted with future development, direct and indirect impacts can be offset through strict compliance with CPU policies, regulatory compliance (CPIOZ) and the Mitigation Framework identified in EIR for biological resources. Historical resources are mainly concentrated in the southern portion of the CPU. Future development has the potential to impact archaeological sites recorded across this area of the CPU; however, these potential impacts can be mitigated through strict adherence to the CPU policies, regulatory compliance (CPIOZ) and implementation of the Mitigation Framework further detailed in Chapter 5 of the EIR.

While the Otay Mesa area includes agricultural land uses, the community has planned for the conversion of agricultural lands to more intensive residential, commercial and industrial uses. As further described in Chapter 5 (Environmental Analysis) of the EIR, the loss of any remaining agricultural land uses in the CPU would not constitute a significant adverse effect. The same would hold true for mineral resources within the CPU. The loss of mineral resources would be the result of conversion of undeveloped land to more intensive uses, thereby eliminating the potential for extraction activities. However, only a small area within the northwestern portion of the CPU contains regionally significant aggregate resources (MRZ-2). These resources are mapped in a portion of the CPU area where development currently exists or where entitlements have already been approved for future development. Therefore, access to these areas of significant aggregate is already restricted, which precludes the likelihood of extraction of those resources. Furthermore, the surrounding residential and commercial development in close proximity to this area would not be compatible with the extraction processes.

Otay Mesa is an area which has been planned for growth and is currently accessible via regional transportation facilities (e.g., I-805, SR-905, and SR-125). Access would be enhanced through improvements to community plan roads which link to surrounding areas. Surrounding land under jurisdiction of the City of Chula Vista and the County is also planned for future growth with similar land uses. Therefore, the CPU would not have a significant irreversible commitment to unplanned land use.

However, future development of the CPU area would represent a long-term commitment to a more intensive land use. Therefore, implementation of the CPU would involve an irreversible commitment to the use of non-renewable resources in the form of water, natural gas, and electricity.

Construction of future development implemented in accordance with the CPU would require consumption of non-replenishable resources, or resources which may renew slowly. These resources would include certain types of lumber and other forest products; aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone); metals (e.g., steel, copper and lead); petrochemical construction materials (e.g., plastics, asphalt); and water. Fossil fuels, such as gasoline and oil, would also be consumed in the use of construction vehicles and equipment, as well as in lighting, heating, cooling, and other operational uses of future development and transportation of people to/from and within the community. As described throughout the PEIR, the CPU includes policies aimed at improving energy efficiency, reducing water use, and minimizing impacts on other natural resources. The CPU policies also build upon sustainability principles, which would reduce energy consumption. For example, the CPU village concept would reduce dependence on fossil fuel energy sources by integrating housing units in close proximity to employment centers and along transit corridors. These policies would serve to reduce irreversible water, energy, and building materials consumption associated with construction and occupation.

With respect to environmental accidents potentially associated with the CPU and as further discussed in the EIR, although the Hazardous Materials Technical Study (HMTS) identified 23 sites of potential environmental concern located within the CPU area only six (6) were considered potentially significant. Within the CPU, the risk for wildfires is highest in areas of natural, unmaintained open space, and as development occurs adjacent to these areas the risk increases. The City operates Brown Field Municipal Airport in the north-central portion of the CPU. This airport provides business, corporate, training, and charter aviation services that support commercial and industrial activities within the region. Air traffic in and out of Brown Field is controlled by the FAA, and land uses associated with airport operations are covered in an adopted ALUCP. Based on the analysis provided in Chapter 5.6, although conditions exist within the CPU associated with hazardous materials, risk of wildfires, and aircraft operations, the CPU contains policies and a Mitigation Framework intended to assure compliance with regulatory requirements which would reduce the potential for environmental accidents.

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10.0 Project Alternatives

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an EIR compare the effects of a “reasonable range of alternatives” to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The “range of alternatives” is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, while also taking into account economic, environmental, social, technological, and legal factors.

The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would feasibly accomplish most or all of the basic objectives of the CPU;
- The extent to which the alternative would avoid or substantially lessen any of the identified significant environmental effects of the CPU;
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a “no project” alternative; and to identify an “environmentally superior” alternative in addition to the no project alternative (Section 15126.6[e]).

As discussed in Chapter 5, the CPU would result in significant, direct, and/or cumulative environmental impacts related to land use, air quality, biological resources, geology/soils, historical resources, human health/public safety/hazardous materials, noise, paleontological resources, traffic/circulation, utilities, and greenhouse gas emissions. In developing the alternatives to be addressed in this section, consideration was given regarding their ability to meet the basic objectives of the CPU and eliminate or substantially reduce significant environmental impacts (as identified in Chapter 5 of this PEIR).

The following specific objectives for the CPU support the underlying purpose of the project, assist the City as Lead Agency in developing a reasonable range of alternatives to evaluate

in this PEIR, and will ultimately aid the Lead Agency in preparing findings and overriding considerations, if necessary. The following primary goals, recommendations, and objectives of the CPU are to:

- **Regional Center:** Enhance Otay Mesa's role as a bi-national regional center.
- **Economic Diversification:** Broaden the economic profile to increase employment and growth opportunities.
- **Industrial Capacity:** Enhance and sustain Otay Mesa's strong economic base and potential for expansion.
- **International Trade:** Support activities that promote greater interregional and bi-national activities.
- **Housing:** Provide more and varied housing and meet workforce needs close to employment centers.
- **Complete Places:** Create balanced, integrated mix of uses in Otay Mesa while minimizing collocation compatibility issues.
- **Transit:** Coordinate land use planning with high frequency transit service planning.
- **Open Space:** Protect the canyon lands and sensitive biological resources while providing recreational opportunities.
- **Infrastructure:** Include financing mechanisms that can secure infrastructure improvements concurrent with development.
- **Environmental Leadership and Sustainability:** Follow environmentally sensitive design and sustainable development practices.

The above objectives are specific to the Otay Mesa planning area, and are intended to implement the broader goals, policies, and Guiding Principles of the General Plan. Following are the Guiding Principles of the General Plan.

- An open space network formed by parks, canyons, river valleys, habitats, beaches and ocean;
- Diverse residential communities formed by the open space network;
- Compact walkable mixed-use villages of different scales within communities;
- Employment centers for a strong economy;
- An integrated regional transportation network of walkways, bikeways, transit, roadways, and freeways that efficiently link communities and villages to each other and to employment centers;
- High-quality, affordable, and well-maintained public facilities to serve the City's population, workers, and visitors;
- Historic districts and sites that respect our heritage;

- Balanced communities that offer opportunities for all San Diegans and share citywide responsibilities;
- A clean and sustainable environment; and
- A high aesthetic standard.

This chapter identifies one alternative that was eliminated from further consideration and reasons for dismissal, and analyzes a No Project Alternative, the Reduced Biological Impacts Alternative, and the Reduced Density Alternative in comparison to the potential environmental impacts associated with the CPU. Each major issue area included in the detailed impact analysis of this PEIR has been given consideration in the alternative analysis. A summary comparison of the No Project Alternative, the Reduced Biological Impacts Alternative, and the Reduced Density Alternative, with the CPU is included in Table 10-1, below.

As required under Section 15126.6 (e)(2) of the CEQA Guidelines, the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among the alternatives evaluated must be identified as the environmentally superior project.

10.1 Alternatives Considered but Rejected

An alternative was considered where all vernal pools and vernal pool species would be conserved. In order to ensure the long-term viability of the vernal pools and species, conservation of associated watersheds and sufficient buffers would also be required. While this alternative would significantly reduce impacts to vernal pool resources and the surrounding non-native grasslands, this alternative was rejected because the ability to provide a neighborhood village within the southwest CPU area would be severely constrained.

Due to the scattered location of the vernal pool resources within the southwest village area, the available development area would not result in compact development, but would separate out exclusive development areas without an integrated circulation pattern or open space system. Benefits of the village areas such as but not limited to compact development, multi-modal transportation networks and mixed-use development opportunities as further described below, would not be realized. In addition, the following goals and objectives of the General Plan and CPU for this area would not be achieved:

10.0 Alternatives

- Diverse residential communities formed by the open space network;
- Compact walkable mixed-use villages of different scales within communities;
- Integrated regional transportation network of walkways, bikeways, transit, roadways, and freeways that efficiently link communities and villages to each other and to employment centers;
- Distinct villages that include places to live, work and recreate;
- Require a mixed-use residential/commercial component to be included within village core areas, with neighborhood-serving commercial uses such as food markets, restaurants, and other small retail shops.

10.2 Alternatives Considered

This EIR evaluates three alternatives to the CPU: (1) No Project Alternative; (2) Reduced Biological Impacts Alternative; and (3) Reduced Density Alternative.

Descriptions of each alternative and their impacts are provided below. Also, Table 10-1 provides a side-by-side comparison of the potential impacts of the alternatives to the impacts of the CPU.

**TABLE 10-1
MATRIX COMPARISON OF THE CPU AND PROJECT ALTERNATIVES**

Environmental Issue Area	CPU	No Project/Adopted Plan	Reduced Biological Impacts Alternative	Reduced Density Alternative
Land Use	SM	Same as CPU	Less than CPU	Less than CPU
Landform Alteration/Visual Quality	LS	Greater than CPU	Less than CPU	Same as CPU
Air Quality	SU - (Regional Air Quality Standards, Stationary Sources/Collocation)	Greater than CPU	Less than CPU	Less than CPU
Biological Resources	SM	Greater than CPU	Less than CPU	Same as CPU
Historical Resources	SM	Greater than CPU	Less than CPU	Same as CPU
Human Health/ Public Safety/ Hazardous Materials	SM	Same as CPU	Greater than CPU	Less than CPU
Hydrology/ Water Quality	SM	Greater than CPU	Less than CPU	Same as CPU
Geology/Soils	SM	Same as CPU	Same as CPU	Same as CPU
Energy Conservation	LS	Same as CPU	Less than CPU	Less than CPU
Noise	SU - (Traffic Stationary Sources and construction only)	Stationary sources: Less than CPU; Traffic noise: Greater than CPU.	Less than CPU	Less than CPU
Paleontological Resources	SM	Greater than CPU	Less than CPU	Same as CPU
Traffic/Circulation	SU(Capacity)	Greater than CPU	Less than CPU	Less than CPU
Public Services	LS	Same as CPU	Same as CPU	Same as CPU
Utilities	SU (Solid Waste)	Same as CPU	Same as CPU	Same as CPU
Water Supply	LS	Same as CPU	Same as CPU	Same as CPU
Population and Housing	LS	Same as CPU	Same as CPU	Same as CPU
Agriculture /Mineral Resources	LS	Same as CPU	Same as CPU	Same as CPU
Greenhouse Gas Emissions	SU - (Plan Consistency; GHG Emissions)	Greater than CPU	Less than CPU	Less than CPU

LS = less than significant; SM = significant and mitigated; SU = significant and unavoidable

10.2.1 No Project Alternative (Adopted Community Plan)

Consistent with CEQA Guidelines Section 15126.6(e)(3)(A), the No Project Alternative represents the continued implementation of the adopted 1981 Otay Mesa Community Plan as shown on Figure 10-1, Including amendments to the plan as further described in Table 10-2, which more accurately reflects the current conditions of the community planning area.

**TABLE 10-2
UPDATES TO ADOPTED COMMUNITY PLAN**

-
- The MHPA boundary was provided by MSCP staff and reflects the City's adopted MSCP Subarea Plan and MHPA (1997) and subsequent MHPA boundary line adjustments have occurred as part of prior discretionary project approvals.
 - Freeway alignments and ROW limits for SR-905 and SR-125 were incorporated.
 - The extent of residential land use designations was modified to reflect the actual limits of existing development (using aerial photograph to determine the edge of development).
 - The development area on the northern edge of Brown Field was extended in one location based on existing development patterns.
 - The industrial area at the northwest corner of Brown Field was extended.
 - The MHPA boundaries along the western edge of the industrial development was corrected to reflect the actual limits of development and conserved open space consistent with the approved International Business Center project (EQD No. 86-0536).
 - The existing fire station at the northeast corner of Otay Mesa Road and La Media was incorporated.
 - Changes to school/park sites were incorporated as follows:
 - i. The high school site was reconfigured/relocated based on the actual development area for San Ysidro High School.
 - ii. The community park south of SR-905 where the high school now exists was relocated to the Beyer Athletic Area in the adjacent San Ysidro community. This approximately 20-useable-acre community park would satisfy 15 acres of community park requirements in the Otay Mesa community and 5 acres of neighborhood park requirements in the San Ysidro community.
 - iii. The boundaries of the community park, school site, and medium-high residential area located north of SR-905 was revised to reflect the actual boundaries of the school and park.
 - iv. The school site east of the community park (north of SR-905) was designated as a combined elementary/junior high school based on its current configuration as a K-8 school and the potential for it to become a junior high school when the elementary school to the west of the community park is constructed.
 - v. The elementary school and portions of the very low and low-medium density residential area designated south of Old Otay Mesa Road was deleted and designated as open space.
-

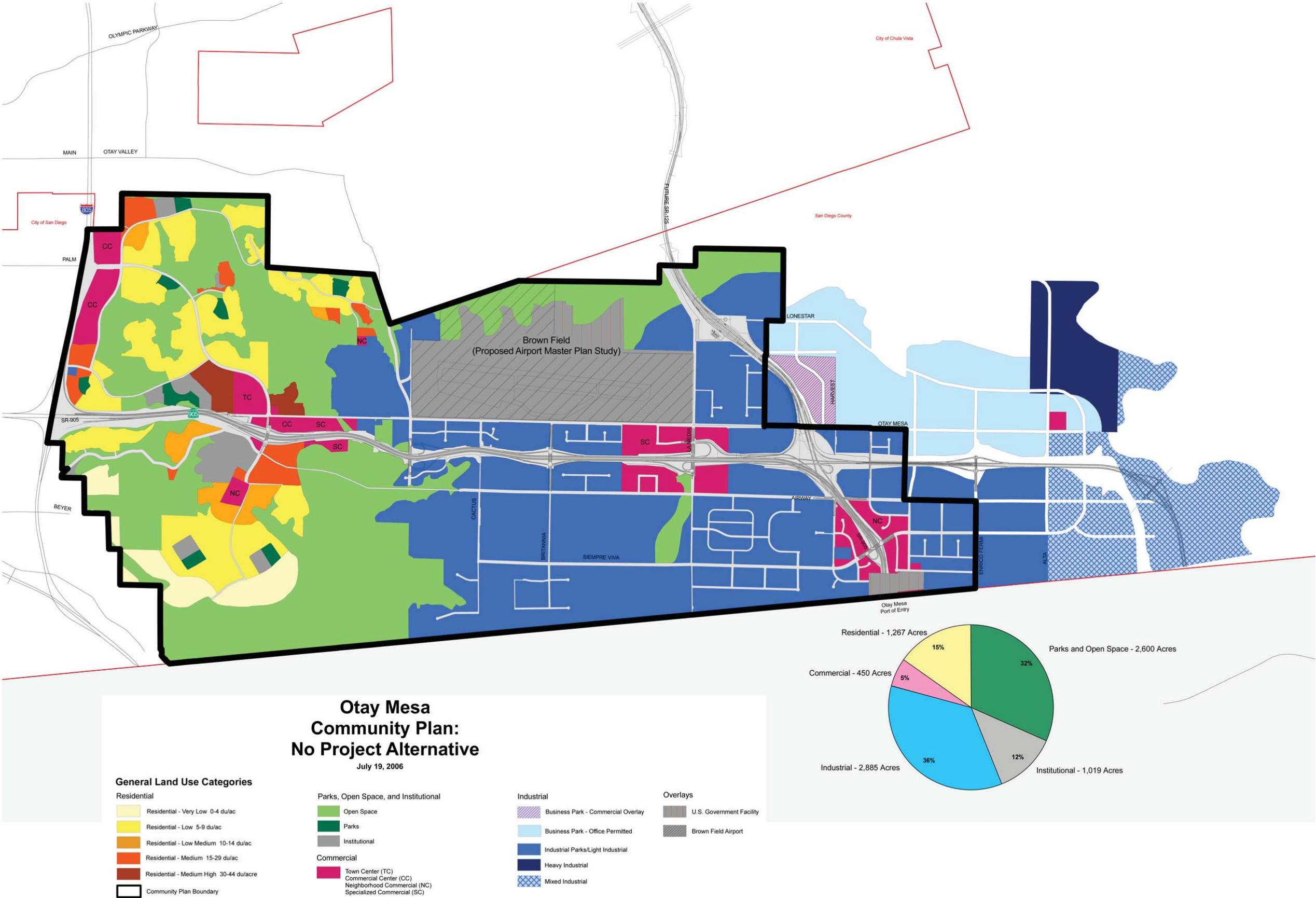


FIGURE 10-1
Concept of the No Project Alternative

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Buildout projections for the No Project Alternative compared to the CPU are shown below in Table 10-3.

**TABLE 10-3
COMPARISON OF NO PROJECT ALTERNATIVE WITH CPU**

Land Use Categories	Adopted Community Plan as modified (No Project Alternative) ¹	CPU ²
Residential	1,269 ac/ 12,400 du	813 ac/ 18,774 du
Commercial	452 ac/ 5,776,000 sq. ft. ⁴	284 ac/ 3,917,000 sq. ft. ⁴
Village Centers	0	560 ac
Industrial	2,839 ac/ 64,465,000 sq. ft. ⁴	2,528 ac/ 54,461,000 sq. ft. ^{4,5}
Institutional	1,027 ac	1,125 ac
Parks	64 ac	153 ac
Open Space	2,570 ac	2,837 ac
Right-of-Way	1,098 ac	1,023 ac
ADT	1,165,103 ⁴	1,045,025 ⁴
TOTAL	9,319ac ³	9,323 ac

¹SOURCE: City of San Diego Otay Mesa Community Plan Update, April 2011 Public Draft

²SOURCE: City of San Diego Draft CPU Land Use Map, September 10, 2013

³Acreage discrepancy due to mapping limitations

⁴SOURCE: Urban Systems. Transportation Analysis for the OMCPU, June 2012

⁵Industrial Uses under the CPU include Heavy and Light industrial, IBT and Business Park land use categories

ac = acre; du = dwelling unit; sq. ft. = square feet.

Compared to the CPU, the No Project Alternative would have lower density of residential land use per acre while allowing for more industrial land use per acre. A total population of 46,392 people would be projected for the plan horizon year (2030) under this alternative with approximately 12,400 dwelling units permitted under the adopted plan. The general distribution of land uses in the No Project Alternative would have residential uses on the west and industrial uses in the central-eastern areas. The residential uses on the west would be comprised of conventional suburban development, while the industrial uses on the east would mainly include labor intensive manufacturing, warehousing, and distribution, with only limited office uses.

An issue-by-issue comparison of the No Project Alternative and the CPU is presented below.

10.2.1.1 Land Use

As residential and industrial lands uses would be primarily segregated with the No Project Alternative, potential impacts associated with the adjacency of residential and industrial uses would be avoided. However, some beneficial features of the CPU would not occur. These include the integration of village centers along transportation corridors, creation of Community and Neighborhood Villages, and the inclusion of new specific land use designations (e.g., International Business and Trade and Business Park – Residential Permitted). As such, the goals and objectives of both the CPU and the General Plan would

not be achieved. Moreover, this segregation of land uses would not be as conducive to high-frequency transit service and could present obstacles to the future construction of supporting infrastructure. Overall, the No Project Alternative would provide less open space and fewer acres of parkland than the CPU, as industrial development would occur on both sides of SR-125 in the northeastern portion of the CPU area.

Despite the differences in future development patterns when compared to the CPU, the No Project Alternative would also require compliance with both the ESL and Historical Resources Regulations of the LDC, along with the MHPA Land Use Adjacency Guidelines, which includes site-specific review at the project-level. Therefore, as with the CPU, while the No Project Alternative would result in potentially significant impacts to resources covered under these regulations, these impacts can be reduced to below a level of significance with mitigation at the project-level.

10.2.1.2 Landform Alteration/Visual Quality

Within the primarily developed western third of the CPU area, the No Project Alternative would result in roughly the same visual quality impacts as the CPU. This is because the residential land use patterns in the No Project Alternative would be similar to the CPU, although more open space would be provided under the CPU within the southwest quadrant as compared to the No Project Alternative. However, unlike the CPU, the No Project Alternative would not introduce new residential and additional commercial components within the eastern industrial areas and would not result in an integrated community with respect to design and community character; Additionally, Urban Design policies developed for the CPU would not be envisioned under the No Project Alternative, and therefore from an overall visual perspective of the built out community, the aesthetic impacts would be greater than anticipated for the CPU.

10.2.1.3 Air Quality/Odor

Overall, the No Project Alternative would result in less integration of jobs and housing and generate more vehicle trips when compared to the CPU. In addition, under the No Project Alternative, village centers with transit stations would not be created. As such, the goals of reducing trips and air emissions contained in the General Plan would not be achieved under the No Project Alternative.

The No Project Alternative would be consistent with the RAQS and SIP, because no changes in land use would occur. The CPU would not be consistent with the adopted community plan land use designations upon which the RAQS and SIP were based; however, the changes in the land uses under the CPU and the reduced traffic generated under the CPU would result in fewer emissions than the No Project Alternative. Neither the No Project Alternative nor the CPU would obstruct or conflict with the implementation of the San Diego RAQS or applicable portions of the SIP, and impacts would be less than significant for both.

Impacts associated with both construction and operational emissions of criteria pollutants under the No Project Alternative would be greater than those identified for the CPU. The No Project Alternative would include a greater number of industrial uses (stationary emission sources), more truck traffic (diesel emissions), and a greater ADT volume than the CPU. Therefore, under the No Project Alternative, total ROG, NO_x, CO, SO, PM₁₀ and PM_{2.5} emissions would be greater than emissions under the CPU. By comparison, the No Project Alternative would result in greater impacts than the CPU relative to air quality/odor.

10.2.1.4 Biological Resources

Because the amount of preserved open space would be less, the No Project Alternative would result in greater impacts to biological resources than those anticipated under the CPU. As with the CPU, implementation of the No Project Alternative would also be required to adhere to all applicable federal, state, and local regulations regarding the protection of biological resources, as described in Section 5.4, for all discretionary project submittals. Under this alternative, future applicants would not have the opportunity to provide documentation under a ministerial process demonstrating that no impacts to biological resources would occur and therefore, similar requirements for project-specific biological analysis in accordance with the ESL Regulations and Biology Guidelines, as outlined in the CPU Mitigation Framework would apply in either case. Therefore, impacts under this alternative would be similar, but slightly greater than those identified for the CPU because less developable land would be converted to open space and development patterns would remain as they are today

10.2.1.5 Historical Resources

Historical and prehistoric resources (see Table 5.5-1), are known to exist within the CPU. Therefore, future development (and associated grading) has the potential to result in significant direct and/or indirect impacts to historical resources for both the No Project Alternative and the CPU. As with the CPU, because development would still be allowed in accordance with existing zoning under a discretionary review process, implementation of this alternative would require future projects to adhere to all applicable federal, state, and local regulations regarding the protection of historical resources, as described in Section 5.5, along with the identified mitigation framework, which would be applied at the project-level. However, although impacts to historical resources under this alternative would be similar to the CPU, unlike the CPU, the No Project Alternative does not provide a mechanism for ministerial review under a CPIOZ Type A at the project-level to demonstrate that no historical resources are present on the site. All projects under this alternative would be subject to discretionary review which includes evaluation in accordance with the Historical Resources Regulation and Guidelines, and would be required to provide applicable mitigation for potential impacts to a significant resource. The extent of impacts to historical resources resulting from implementation of the No Project Alternative would be similar, but slightly greater than those identified for the CPU because less land would be preserved in

open space under this alternative and development patterns would remain as they are today and would be subject to future grading.

As with the CPU, implementation of this alternative would require future projects to adhere to all applicable federal, state, and local guidelines and regulations related to historical resources, as described in Section 5.5, along with the identified mitigation framework, which would be applied at the project-level and therefore would not result in a significant impact.

10.2.1.6 Human Health/Public Safety/Hazardous Materials

As discussed in Section 5.6—Human Health/Public Safety/Hazardous Materials, implementation of the CPU could be subject to hazards from the presence of hazardous materials that would be encountered during future grading and/or construction-related activities. Additionally, because of the existing and proposed land use patterns around which the community is formed, new development in the wildland interface areas may expose additional people and structures to wildland fire hazards, representing a potentially significant impact. However, under both the CPU and the No Project Alternative, all projects would be required to comply with the Brush Management Regulations and Landscape Standards of the LDC and any other applicable requirements conditioned on project approval by the City Fire Marshal, and therefore would preclude the potential for impacts under both the No Project Alternative and the CPU.

Because the No Project Alternative would segregate residential land use from industrial uses to a greater extent than under the CPU, the risk of exposure to hazardous materials would be less. However, the No Project Alternative designates more industrial acreage than the CPU, which would result in a potential for increase in the use of hazardous materials under the No Project Alternative. Hazardous materials impacts would require similar mitigation for new development through compliance with all applicable federal, state, and local regulations regarding hazardous materials siting, assessment, and remediation and would preclude the potential for impacts under both the No Project Alternative and the CPU.

10.2.1.7 Hydrology and Water Quality

Although the land use pattern and distribution for the No Project Alternative differs from the CPU, the area to be developed is roughly similar. Less open space would be preserved under the No Project Alternative when compared to the CPU; therefore, this alternative would result in slightly greater impacts associated with hydrology, flooding and water quality. Future development would be required to comply with existing federal, state and local regulations relative to runoff and water quality at the project-level which would preclude the potential for impacts under both the No Project Alternative and the CPU.

10.2.1.8 Geology/Soils

As discussed in Section 5.8 –Geology/Soils, impacts to geology and soils resulting from implementation of the No Project Alternative would be similar to those identified for the CPU. As with the CPU, implementation of the No Project Alternative has the potential to result in significant impacts related to geologic hazards. Future development would be exposed to geological hazards associated with unstable conditions related to compressible soils, landslides, seismicity (faults), and expansive soils. Future development under both the No Project Alternative and the CPU would be required to comply with existing federal, state and local regulations relative to engineering and construction which would preclude the potential for impacts under both the No Project Alternative and the CPU.

10.2.1.9 Energy Conservation

Development under the No Project Alternative would result in an energy demand of about 821 million kilowatt hours per year (kWh/yr) for electricity and 1.18 billion thousand British Thermal Units (kBtu) per year of natural gas which would be greater than the demand associated with the CPU, which would result in an energy demand of approximately 772 million kilowatt hours per year (kWh/yr) and 1.15 billion kBtu per year of natural gas. Similar to the CPU, the No Project Alternative would not result in the use of excessive amounts of fuel or other forms of energy during construction. Also, the adopted plan, like the CPU, is not anticipated to result in a need for new electrical systems or require substantial alteration of existing utilities, which would create physical impacts. Based on the program-level analysis of both the CPU and No Project Alternative, impacts associated with energy use would be similar and less than significant.

10.2.1.10 Noise

The CPU would result in significant unavoidable impacts due to stationary and traffic noise sources. Noise impacts resulting from implementation of the No Project Alternative would be incrementally less than those identified for the CPU relative to stationary noise sources. Fewer areas of collocation would occur under the No Project Alternative and, therefore, the potential for noise sensitive land uses to be exposed to excessive noise would be less than under the CPU. Additionally, the residential and industrial land uses would be segregated to a greater extent under the No Project Alternative, thereby decreasing the exposure of noise sensitive users.

Implementation of the No Project Alternative would result in greater traffic volumes resulting in more traffic noise when compared to the CPU. Therefore, existing sensitive receptors may experience greater noise impacts from transportation-related noise sources under the No Project Alternative. While noise impacts of this alternative would be somewhat less than the CPU for stationary sources and somewhat greater for traffic sources, overall impacts would remain significant and unavoidable for this alternative as with the CPU.

10.2.1.11 Paleontological Resources

Paleontological fossil resources within high and moderate geological formations are known to exist within the CPU area. Therefore, future development has the potential to result in significant direct impacts for both the No Project Alternative and the CPU. As with the CPU, because development (and associated grading) would still be allowed in accordance with existing zoning under a discretionary review process, implementation of this alternative would require future projects to evaluate the potential for impacts in accordance with the Paleontological Guidelines, along with the identified mitigation framework, which would be applied at the project-level. However, although impacts to paleontological resources under this alternative would be similar to the CPU, unlike the CPU, the No Project Alternative does not provide a mechanism for ministerial review under a CPIOZ Type A at the project-level to demonstrate that no paleontological resources are present on the site. All projects under this alternative would be subject to discretionary review which includes evaluation in accordance with the Paleontological Resources Guidelines, and would be required to provide applicable mitigation for potential impacts to a significant resource when a significance threshold is exceeded. The extent of impacts to paleontological resources resulting from implementation of the No Project Alternative would be similar, but slightly greater than those identified for the CPU because less land would be preserved in open space under this alternative and development patterns would remain as they are today and would be subject to future grading.

As with the CPU, implementation of this alternative would require future projects to adhere to all applicable federal, state, and local guidelines related to paleontological resources, as described in Section 5.11, along with the identified mitigation framework, which would be applied at the project-level and therefore would not result in a significant impact.

10.2.1.12 Traffic/Circulation

Impacts associated with the No Project Alternative are addressed in the *Transportation Analysis for the Otay Mesa Community Plan Update* (see Appendix J, Buildout of the Adopted Community Plan analysis). The No Project Alternative would generate approximately 1,165,103 ADT, compared to 1,045,025 ADT generated by the CPU. The report shows that traffic conditions would, therefore, be more congested under the No Project Alternative when compared to the CPU. The No Project Alternative would result in 38 street segments operating at LOS E or F compared to 24 for the CPU in the Horizon Year. The number of peak hour intersections operating at LOS E or F in the AM and/or PM peak hour would be 52 in the Horizon Year for the No Project Alternative and 49 in the Horizon Year for the CPU. In addition, 8 freeway segments would operate at unacceptable levels in the Horizon Year under the No Project Alternative, while 5 freeway segments would operate unacceptably in the Horizon Year for the CPU. Six freeway ramps would operate unacceptably in the Horizon Year No Project Alternative and 5 freeway ramps would operate unacceptably in the Horizon Year with the CPU.

The Transportation Analysis (see Appendix J) identifies mitigation for the No Project Alternative; however, traffic/circulation capacity impacts would be significant and unavoidable, similar to the CPU.

Traffic hazards and circulation and access impacts for the No Project Alternative would be similar to those for the CPU, as both would be subject to the City's Street Design Manual and General Plan policies. While the No Project Alternative does not emphasize alternative transportation to the extent of the CPU, the bus routes and transit in the area are controlled by the MTS and therefore, transit planning would occur regardless of the CPU. Pedestrian orientation would be less emphasized under the No Project Alternative, but this is not anticipated to result in a significant impact relative to alternative transportation, considering that future development would be required to comply with the General Plan policies. The No Project Alternative traffic hazards, circulation and access, and alternative transportation impacts would be less than significant and similar to the CPU.

10.2.1.13 Public Services

The demand for law enforcement, fire protection, educational services, libraries, and parks resulting from implementation of the No Project Alternative would be less than those identified for the CPU as there would be a smaller residential buildout population. As such, the demand for new facilities would be less under this alternative. Impacts related to construction of new facilities under the No Project Alternative would be considered at the time that project-specific designs are available; therefore, this alternative would not result in a significant impact, similar to the CPU.

10.2.1.14 Utilities

Like the CPU, buildout of the No Project Alternative would generate increased demands on water, wastewater and recycled water services, especially in areas where no development or infrastructure currently exists in the CPU area. Improvements to water and recycled water systems have been previously identified in master planning documents. No additional facilities would be necessitated as a result of plan buildout. The physical impacts from these improvements would be evaluated under CEQA at the time they are submitted for review in conjunction with a private development project or as part of a future CIP. Therefore, impacts associated with water and recycled water system improvements would be less than significant at the program-level for both this alternative and the CPU.

Buildout of the No Project Alternative would not directly result in the need for a new landfill. However, compliance with the Storage, Recycling, and C&D ordinances alone would result in only a 40 percent diversion rate within in the CPU area. As under the CPU, future discretionary projects (that meet the threshold) would be required to prepare a Waste Management Plan (WMP) with site-specific waste reduction measures in order to meet the State-mandated 75 percent diversion rate. Because all future projects within the CPU area

may not be required to prepare a WMP or may not reduce project-level waste management impacts to below a level of significance, the No Project Alternative cannot be guaranteed, at the program-level, to meet the 75 percent diversion requirement. Direct impacts associated with solid waste, like the CPU, would be significant and unavoidable.

Additionally, future projects would be required to design and build storm water infrastructure systems to accommodate new development within the CPU area. All future projects under either the No Project Alternative or the CPU would be required to comply with the City's Storm Water Standards at the project-level and design facilities satisfactory to the City Engineer as further detailed in the Mitigation Framework in Section 5.14, regardless of whether the CPU of this alternative are implemented. Therefore, impacts would be less than significant under both the No Project Alternative and the CPU.

10.2.1.15 Water Supply

The No Project Alternative is consistent with water demand assumptions included in the regional water resource planning documents of the SDCWA and MWD. Appendices M-1 and M-2 (Water Supply Assessment Reports) demonstrates that there would be sufficient water to supply future development in accordance with either the No Project Alternative or CPU, and impacts would be less than significant for both this alternative and the CPU.

10.2.1.16 Population and Housing

The No Project Alternative would result in buildout of fewer dwelling units (12,400 dwelling units) relative to the CPU (18,774). In addition, the No Project Alternative would not create mixed-use village centers where residential uses would be integrated with employment and commercial uses as anticipated in the CPU. Thus, the population and economic prosperity goals and objectives of both the General Plan and SANDAG's RCP would not be achieved. However, neither the No Project Alternative, nor the CPU would result in substantial, unanticipated population growth or conflict with the City's affordable housing regulations. Therefore, impacts would be less than significant under both the No Project Alternative and the CPU.

10.2.1.17 Agriculture/Mineral Resources

a. Agriculture

Because neither the No Project Alternative, nor the CPU designate areas for agricultural land uses, no planned long-term agriculture would be eliminated upon full build out under either the CPU or No Project Alternative. Therefore, both the No Project Alternative and the CPU would result in less than significant impacts to agriculture.

b. Mineral Resources

There are no regionally significant MRZ-2 areas within the CPU area. Although the No Project Alternative would have a slightly larger grading footprint than the CPU, there are no significant mineral resources that would be impacted. Therefore, both the No Project Alternative and the CPU would result in less than significant impacts to mineral resources.

10.2.1.18 Greenhouse Gas Emissions

The CPU would introduce higher density residential and commercial land use designations, as well as several new mixed-use and industrial land use designations, which would in turn, reduce VMT, as compared to the No Project Alternative. As such, the GHG emissions associated with the No Project Alternative would be greater than those associated with the CPU. While future development proposals would be required to implement GHG emission reduction measures under both the No Project Alternative and the CPU, buildout of either would result in impacts associated with the contribution of GHG emissions to cumulative statewide emissions that would be considered significant and unavoidable at the program-level.

10.2.1.19 Conclusion Regarding the No Project Alternative

Implementation of the No Project Alternative would not avoid any of the significant and unavoidable impacts of the CPU (air quality (RAQS, stationary sources/collocation), noise, traffic/circulation, utilities [solid waste], and greenhouse gas emissions. This alternative would preserve less open space resulting in greater potential impacts to biological, historical, and paleontological resources because these areas would be available for future development. However, mitigation is available to reduce these potential impacts to below a level of significance regardless of whether the CPU or the No Project Alternative is implemented. This alternative would also generate a greater number of ADT than the CPU, and thus impacts from traffic congestion (such as, air quality, traffic noise and greenhouse gas emissions) would be greater than under the CPU. However, noise associated with stationary sources would be less under the No Project Alternative because the rezone and new land use designations for IBT and BP-R would not occur.

The No Project Alternative meets several of the 10 project objectives, but none to the same extent as the CPU. This alternative does not include the same diversity and flexibility of land uses, and therefore, does not allow for a full range of industrial uses. The IBT designation included under the CPU, better implements General Plan and CPU goals relative to a subregional employment center.

The No Project Alternative also does not include the two mixed-use villages as proposed by the CPU. The village areas proposed under the CPU implement both General Plan and CPU goals for compact communities, a wider range of housing types, affordability, greater transit opportunities, etc. The No Project Alternative would allow for some suburban-type

development, which could be more auto-centric, and contribute to, rather than reduce GHG impacts.

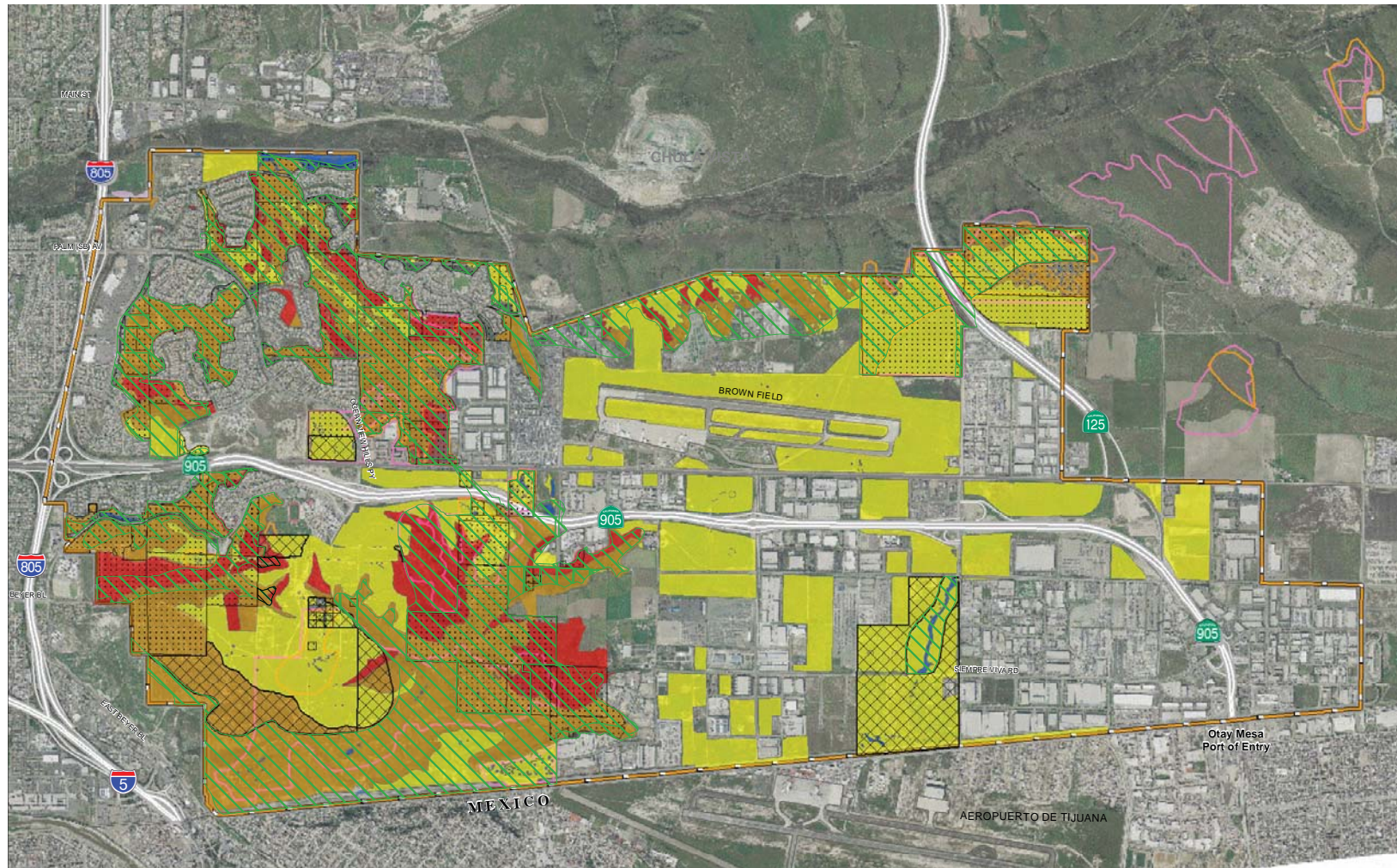
10.2.2 Reduced Biological Impacts Alternative

The Reduced Biological Impacts Alternative is intended to reduce impacts to biological resources in within the CPU area, as illustrated on Figure 10-2. Three locations of reduced impacts would occur within the western portion of the CPU area including: the Southwest Village; the community commercial site west of Oceanview Hills Parkway and north of Otay Mesa Road; and southwest of San Ysidro High School. Reduction in these areas would result in increased preservation of coastal sage scrub, maritime succulent scrub, vernal pools and vernal pool species, as well as non-native grasslands with the potential for vernal pool and burrowing owl habitat restoration. The preservation of coastal sage scrub habitat within the Southwest Village area would improve connections to local habitat corridors to the west between I-805, Beyer Boulevard, and East Beyer Boulevard. In the location west of the San Ysidro High School, this alternative would conserve vernal pool resources and non-native grasslands, consistent with the USFWS Biological Opinion that has been prepared for the Candlelight project site.

An additional location where impacts would be reduced is located along the drainage area west of La Media Road in the south-central portion of the CPU area. Preservation of non-native grassland at this location would reduce impacts to and preserve vernal pools and their associated watersheds, as well as, habitat for burrowing owl. Preservation at this location would also include riparian and mule fat scrub habitat. In addition, the local habitat corridor would be improved from the International Border north to Airway Road.

The land within these areas of reduced impact would become part of the MHPA and development potential would be restricted to 25 percent within the least sensitive portion of the site. The only exception would be the eastern mesa within the Southwest Village which would be 100% conserved. This area has a high potential for vernal pool and burrowing owl restoration due to the appropriate vernal pool soils, connectivity with the adjacent open space network, and minimum edge effects. As a partial offset for this conservation area, a MHPA Boundary Line Adjustment (see Figure 10-2) may be considered within two small canyon heads located south of the proposed Beyer Boulevard on the western edge of the Southwest Village area.

The discussion of this alternative is conceptual, as detailed land use plans have not been prepared. A summary of the conceptual modifications and the associated environmental impacts under this alternative for each of the issue areas is presented below.



No Scale



FIGURE 10-2
Reduced Biological Impacts Alternative

10.2.2.1 Land Use

Application of this alternative would preserve additional biologically sensitive lands in the western portion of the CPU area and along the drainage located west of La Media Road, thereby reducing impacts to coastal sage scrub habitat and maritime succulent scrub habitat, nonnative grasslands, mulefat scrub, riparian, vernal pools and vernal pool species, and burrowing owl habitat. Although this alternative would not allow for the same amount of development within the Southwest Village and IBT designation, it would be generally consistent with the policies of the General Plan and the CPU including LU 2.1-2, LU 2.6-1, UD4.2-6, and UD 4.3-1 (see Table 5.4-5).

The Reduced Biological Impacts Alternative would allow for less grading or ground disturbing activity, and thus would reduce conflicts with the purpose and intent of the ESL Regulations and the Historical Resources Regulations of the LDC as compared to the CPU. Impacts associated with the City's MHPA Land Use Adjacency Guidelines would be similar under both this alternative and the CPU. As with the CPU, the Reduced Biological Impacts Alternative would result in significant impacts which would be reduced to below a level of significance at the program level with implementation of the Mitigation Framework which requires regulatory compliance with the LDC and all applicable standards and guidelines. Therefore, impacts related to Land Use compliance under this alternative would be similar to or less than under the CPU.

10.2.2.2 Landform Alteration/Visual Quality

The increase in open space resulting from this alternative would reduce the extent of landform alteration and grading. Non-native grasslands, vernal pool resources and restorable lands for vernal pool and burrowing owl would be conserved in the southwest portion of the community and the drainage area west of La Media Road. Additionally, coastal sage scrub and maritime succulent scrub located on the steep slopes in the southwest area would be preserved along with the riparian habitat in the drainage area west of La Media Road. The reduced grading, preservation of steep slopes, and increased open space would improve the aesthetic characteristics of the built out CPU area. Therefore, the Reduced Biological Impacts Alternative would reduce the visual quality impacts associated with the CPU.

10.2.2.3 Air Quality/Odor

The Reduced Biological Impacts Alternative would include more open space than the CPU, thereby resulting in fewer residences in the southwest village and less community commercial and industrial/business park development within the CPU. Correspondingly, this alternative would generate fewer ADT than the CPU. Like the CPU, the Reduced Biological Impacts Alternative would not be consistent with the adopted community plan land use designations upon which the RAQS and SIP were based; however, the changes in the land

uses under both the CPU and this alternative would result in reduced traffic, and in turn, fewer emissions than under the adopted Community Plan. Although neither the Reduced Biological Impacts Alternative, nor the CPU would obstruct or conflict with the implementation of the San Diego RAQS or applicable portions of the SIP, impacts associated with both construction and operational emissions of criteria pollutants covered under the RAQS for this alternative would be the same as the CPU and remain significant and unavoidable. Despite the reduction in ADT under this alternative, development would still occur relative to residential, commercial and industrial land uses, and therefore, impacts associated with stationary sources and collocation would remain significant and unavoidable as with the CPU.

10.2.2.4 Biological Resources

By definition the Reduced Biological Impacts Alternative would increase the acreage of biological sensitive habitat and species preserved throughout the CPU area. This alternative would reduce impacts to coastal sage scrub and maritime succulent scrub habitat, non-native grasslands, vernal pools and vernal pool species, and burrowing owl habitat within the Southwest Village area. Additionally, mulefat scrub, riparian, and non-native grassland would be preserved within the drainage area west of La Media Road. Preservation of the non-native grasslands would also reduce impacts and preserve vernal pools and their associated watersheds, as well as, habitat for burrowing owl. Wildlife corridors also would be conserved to a greater extent under this alternative.

This alternative would implement several of the CPU policies relating to biological resources including CE 8.1.1, CE 8.1.2, CE 8.1.4, CE 8.1.5, CE 8.1.6, CE 8.1.7, CE 8.1.8, CE 8-1-10, and CE.8.1.11 (see Table 5.4-5). In addition to increased preservation of the biological resources, this alternative would increase available acreage for restoration of vernal pool and burrowing habitat, provide expanded wildlife linkages, and decrease impacts to critical habitat for San Diego fairy shrimp and *Navarretia Fossalis*. This alternative would lessen impacts to coastal sage scrub, non-native grassland, vernal pools and burrowing owls. Therefore, impacts to biological resources would be less under the Reduced Biological Impacts Alternative when compared to the CPU. Therefore, as with the CPU, projects implemented under this alternative that are consistent with the CPU, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that are no biological resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of an focused Biological Survey prepared by a qualified biologist in accordance with the City's Biology Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Biological Resources. Although impacts would be slightly less under this alternative when compared to the CPU, strict adherence to the Mitigation Framework would still be required to reduce potential

impacts to below a level of significance. Therefore, as with the CPU, impacts to biological resources would be reduced to below a level of significance at the program-level.

10.2.2.5 Historical Resources

Impacts to historical resources resulting from implementation of the Reduced Biological Impacts Alternative would be reduced, because the extent of grading would be less than under the CPU. With preservation of greater open space, this alternative would result in potential avoidance of impacts to historical resources. It should be noted however, that under both this alternative and the CPU, future development in areas designated for commercial and industrial uses on properties that have not been previously graded, or have been graded but have not otherwise developed, would be subject to review in accordance with the supplemental regulations for CPIOZ Type A (ministerial). For these project types that are consistent with the CPU, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that are no archaeological resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of an Archaeological Survey prepared by a qualified archaeologist in accordance with the City's Historical Resources Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Historical Resources. Although impacts would be slightly less under this alternative when compared to the CPU, strict adherence to the Mitigation Framework would still be required to reduce potential impacts to below a level of significance.

10.2.2.6 Human Health/Public Safety/Hazardous Materials

Impacts under this category resulting from implementation of the Reduced Biological Impacts Alternative would be similar to those associated with the CPU. Despite the reduction in developable land under this alternative, resulting in increased in open space areas, development and grading under this alternative would still occur relative to residential, commercial and industrial land uses, and therefore, impacts associated with hazardous sites, substances, health hazards, wildfire hazards and aircraft hazards would be similar or slightly less than the CPU. However, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.2.7 Hydrology and Water Quality

This alternative would reduce the extent and intensity of development through greater preservation of open space, and therefore, would incrementally reduce the impacts to hydrology and water quality. Despite this reduction, future development under both the Reduced Biological Impacts Alternative and the CPU would still be required to comply with

existing local, state and federal regulations relative to runoff and water quality. Therefore, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.2.8 Geology/Soils

The potential impacts associated with geology and soils resulting from implementation of the Reduced Biological Impacts Alternative would be similar to those identified for the CPU. As with the CPU, implementation of the Reduced Biological Impacts Alternative has the potential to result in significant impacts related to geologic hazards associated with unstable conditions related to compressible soils, landslides, seismicity (faults), and expansive soils. Despite this reduction in developable area future development under both the Reduced Biological Impacts Alternative and the CPU would still be required to comply with existing local, state and federal regulations relative to engineering design and construction in areas where unstable or unsuitable soils have been identified. Therefore, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.2.9 Energy Conservation

Development under the Reduced Biological Impacts Alternative would reduce the energy demand from that described for the CPU. The reduced development intensity in the residential area, community commercial, and industrial/business park area would result in a decreased energy demand as there would be a smaller population within the CPU area. Similar to the CPU, the Reduced Biological Impacts Alternative would not result in the use of excessive amounts of fuel or other forms of energy during construction. Also, this alternative, like the CPU, is not anticipated to result in a need for new electrical systems or require substantial alteration of existing utilities, which would create physical impacts. Based on the program-level analysis of both the CPU and the Reduced Biological Impacts Alternative, impacts associated with energy use would be similar, although slightly less under this alternative, and less than significant.

10.2.2.10 Noise

Noise impacts resulting from implementation of the Reduced Biological Impacts Alternative would be similar to those identified for the CPU relative to stationary noise sources. Similar areas of collocation would occur under the Reduced Biological Impacts Alternative because the IBT land use designation is included, and, therefore, the potential for noise sensitive land uses to be exposed to excessive noise would be similar as under the CPU.

Noise impacts associated with traffic resulting from implementation of the Reduced Biological Impacts Alternative would be incrementally less than those identified for the CPU

because of the reduced land use intensity and likely incrementally reduced traffic volumes on the CPU area roadways. Stationary and traffic-related noise impacts would still likely be significant and unavoidable for the Reduced Biological Impacts Alternative, as for the CPU.

10.2.2.11 Paleontological Resources

Impacts to paleontological resources associated with development under the Reduced Biological Impacts Alternative would be slightly less than under the CPU because of the reduced acreage which would be graded. This reduced grading into sensitive formations would reduce the potential impacts to paleontological resources. It should be noted however, that under both this alternative and the CPU future development in areas designated for commercial and industrial uses on properties that have not been previously graded, or have been graded but have not otherwise developed, would be subject to review in accordance with the supplemental regulations for CPIOZ Type A (ministerial). For these project types that are consistent with the OMCP, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that are no paleontological fossil resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of a Paleontological Letter prepared by a qualified paleontologist in accordance with the City's Paleontological Resources Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Paleontological Resources. Although impacts would be slightly less under this alternative when compared to the CPU, strict adherence to the Mitigation Framework would still be required to reduce potential impacts to below a level of significance.

10.2.2.12 Traffic/Circulation

Impacts associated with the Reduced Biological Impacts Alternative are addressed qualitatively in this analysis. Under the Reduced Biological Impacts Alternative a greater area would be preserved as open space than under the CPU, resulting in a decrease in the number of potential residential dwelling units and the amount of areas designated for community commercial and industrial/business park development. Because of the reduction in the total number of dwelling units as well areas designated for community commercial and industrial square-footage, the total number of ADT's would be reduced when compared to the CPU. This would result in fewer impacts relative to traffic capacity, access and circulation than would occur under the CPU. However, due to the changes in land use and increased intensity of development relative to the existing condition, it is anticipated that the Reduced Biological Impacts Alternative like the CPU would still result in traffic/circulation and capacity impacts, which would remain significant and unavoidable.

Traffic hazards and circulation and access impacts for the Reduced Biological Impacts Alternative would be similar to those for the CPU, as both would be subject to the City's

Street Design Manual and General Plan policies. Pedestrian orientation would be similarly emphasized under the Reduced Biological Impacts Alternative; therefore, it is not anticipated to result in a significant impact relative to alternative transportation. For the Reduced Biological Impacts Alternative traffic hazards and alternative transportation impacts would be less than significant, similar to the CPU.

10.2.2.13 Public Services

Impacts to public services resulting from implementation of the Reduced Biological Impacts Alternative would be similar, although slightly less than those identified for the CPU, as the Reduced Biological Impacts Alternative would decrease the projected population. As such, the demand for new facilities would be slightly less under this alternative. Impacts related to construction of new facilities under the Reduced Biological Impacts Alternative would be considered at the time site-specific design plans are available at the project-level, similar to the CPU; therefore, this alternative would not result in a significant impact, similar to the CPU.

10.2.2.14 Utilities

Like the CPU, albeit to a lesser extent, buildout of the Reduced Biological Impacts Alternative would increase the demand for water, wastewater and recycled water services. Improvements to water and recycled water systems have been previously identified in master planning documents. No additional facilities would be necessitated as a result of buildout of the Reduced Biological Impacts Alternative. The physical impacts from these improvements would be evaluated under CEQA as they are required to be implemented. Therefore, impacts associated with water and recycled water system improvements would be less than significant at the program-level.

Like the CPU, buildout of the Reduced Biological Impacts Alternative would not directly result in the need for a new landfill. However, compliance with the Storage, Recycling, and C&D ordinances alone would result in only a 40 percent diversion rate within in the CPU area. As under the CPU, future discretionary projects (that meet the threshold) would be required to prepare a waste management plan with site-specific waste reduction measures in order to meet the State-mandated 75 percent diversion rate. Because all future projects within the CPU area may not be required to prepare a waste management plan or may not reduce project-level waste management impacts below a level of significance, the Reduced Biological Impacts Alternative cannot be guaranteed, at the program-level, to meet the 75 percent diversion requirement. Therefore, direct impacts associated with solid waste would be significant and unavoidable, similar to the CPU.

Additionally, under this alternative like the CPU, future projects would be required to design and build storm water infrastructure systems to accommodate new development within the CPU area; however, under this alternative less area would be available for development and

therefore, less biological impacts would result. Although the specific location and design details for future storm water infrastructure improvements are unknown at this time and all projects would be reviewed for consistency with the City's Storm Water Standards and designed satisfactory to the City Engineer. Therefore, strict adherence to existing storm water regulations, conformance with General Plan and CPU policies, and implementation of the Mitigation Framework which requires future review under CEQA would assure that impacts associated with the need for an construction of future storm water infrastructure under both this alternative and the CPU would be less than significant.

10.2.2.15 Water Supply

The Reduced Biological Impacts Alternative, like the CPU, is consistent with water demand assumptions included in the regional water resource planning documents of the SDCWA and MWD. Appendices M-1 and M-2 (Water Supply Assessment Reports) demonstrate that there would be sufficient water to supply future development in accordance with the CPU. Because the Reduced Biological Impacts Alternative would yield fewer units than the CPU, there would be adequate water supply for this alternative, and impacts would be less than significant and therefore, similar to the CPU.

10.2.2.16 Population and Housing

The Reduced Biological Impacts Alternative would result in a reduction in the number of dwelling units within the Southwest Village relative to the CPU, and fewer square-feet of Community Commercial and IBT uses. Like the CPU, the Reduced Biological Impacts Alternative would create mixed-use village centers where residential uses would be integrated with employment and commercial uses, but with a lesser intensity of residential uses than under the CPU. Thus, the population and economic prosperity goals and objectives of both the General Plan, and SANDAG's RCP would be achieved. Neither the Reduced Biological Impact Alternative, nor the CPU would result in substantial, unanticipated population growth or conflict with the City's affordable housing regulations. Therefore, impacts would be less than significant under both the Reduced Biological Impact alternative and the CPU.

10.2.2.17 Agriculture/Mineral Resources

a. Agriculture

The adopted Community Plan does not designate land for agricultural land uses, thus no planned long-term agriculture would be eliminated upon full build out of either the CPU or the Reduced Biological Impacts Alternative. Thus, both this alternative and the CPU would result in less than significant impacts to agriculture.

b. Mineral Resources

There are no regionally significant MRZ-2 areas within the CPU area. The Reduced Biological Impacts Alternative would result in reduced grading relative to the CPU, thus there are no significant mineral resources that would be impacted under this alternative. Therefore, both the Reduced Biological Impacts Alternative and the CPU would result in less than significant impacts to mineral resources.

10.2.2.18 Greenhouse Gas Emissions

Like the CPU, the Reduced Biological Impacts Alternative would introduce higher density residential and commercial land use designations, as well as several new mixed-use and industrial land use designations. However, GHG emissions associated with the Reduced Biological Impacts Alternative would be less than those associated with the CPU, because of the greater preservation of open space/reduced intensity of development and fewer associated ADT. While future development proposals would be required to implement GHG emission reduction measures under both the Reduced Biological Impacts Alternative and the CPU, buildout in either case would result in impacts associated with the contribution of GHG emissions to cumulative statewide emissions that would be considered significant and unavoidable at the program-level.

10.2.2.19 Conclusion Regarding the Reduced Biological Impacts Alternative

Implementation of the Reduced Biological Impacts Alternative would reduce but not avoid any of the identified significant and unavoidable impacts of the CPU (i.e., air quality (RAQS, stationary sources/collocation), noise (traffic, construction, and stationary sources), traffic/circulation, utilities (solid waste), and greenhouse gas emissions). However, this alternative would generate fewer ADT due to the greater preservation of open space/reduced amount of residential development within the Southwest Village and reduced amount of development within areas designated as Community Commercial and IBT. Thus, impacts from traffic congestion (such as, air quality, noise, and greenhouse gas emissions) would be incrementally reduced when compared to the CPU. Also, this alternative proposes a greater amount of open space than the CPU, and therefore, would result in less grading and ground disturbance than the CPU. Therefore, this alternative would further reduce impacts to biological resources, historical resources, hydrology/water quality, human health/public safety/hazardous materials, utilities (including solid waste), and paleontological resources.

Although significant and mitigated under both this alternative and the CPU, impacts associated with wildfire hazards may be slightly increased under the Reduced Biological Impacts Alternative due to the greater amount of natural open space in proximity to development.

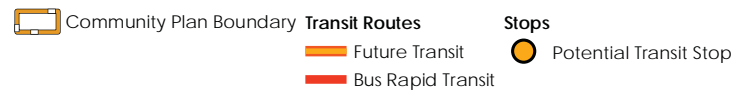
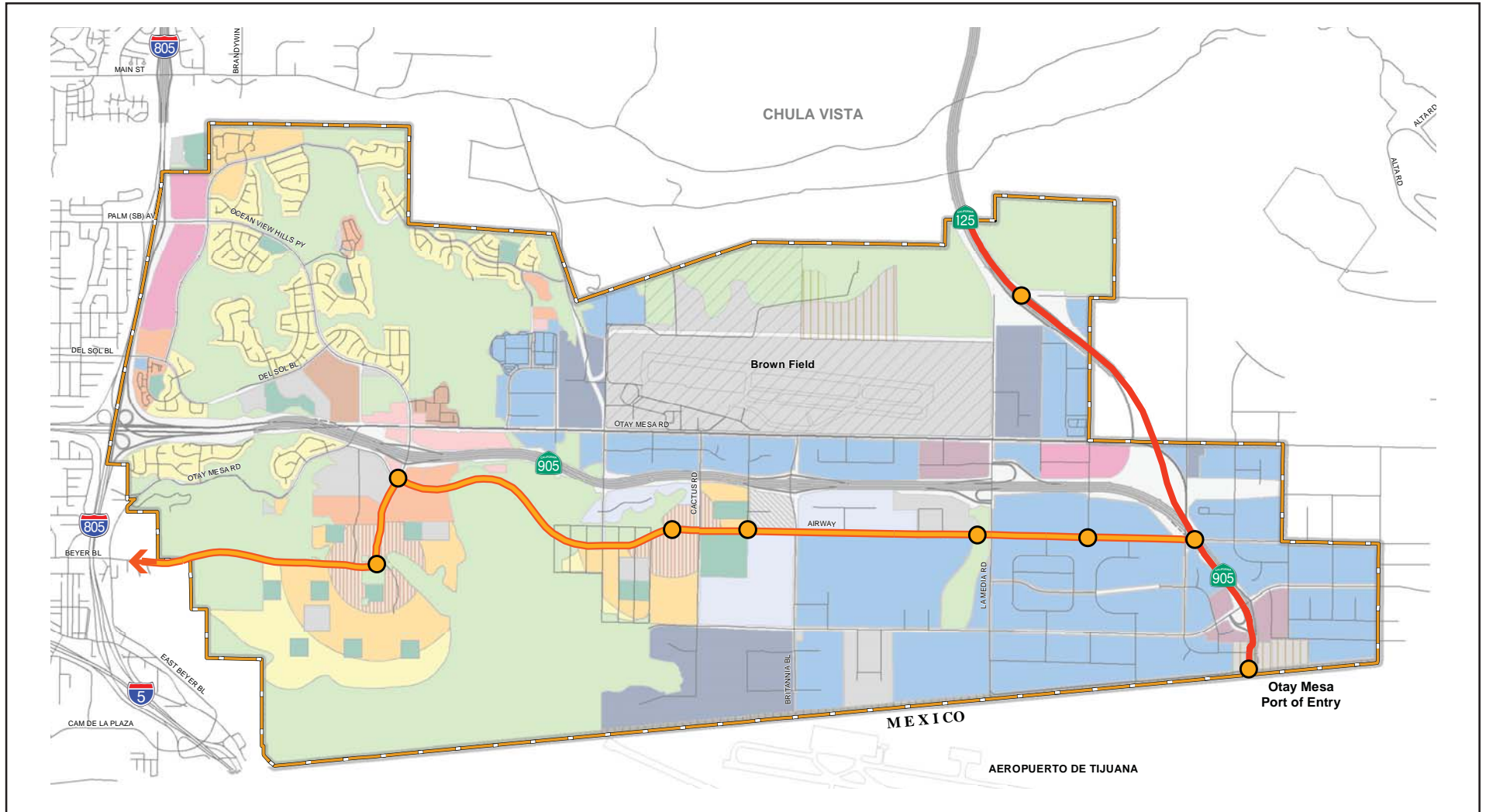
The Reduced Biological Impacts Alternative generally meets the CPU objectives. The alternative preserves more area in open space and in turn reduces the extent of residential development, within areas designated for Community Commercial, and industrial/business park development. This would not however, preclude this alternative from meeting General Plan and Community Plan goals relative to mixed-use, transit-oriented communities, but would not accommodate anticipated population growth to the same extent as the CPU.

10.2.3 Reduced Density Alternative

The Reduced Density Alternative would convert the IBT land use designation to “Light Industrial” and reduce the permitted residential densities within both the Southwest and Central Village areas (Figure 10-3).

The IBT land use designation combines the uses permitted in both Business Park and Light Industrial designations and would allow for single- and multi-tenant office, research and development, in addition to those uses permitted in the Light Industrial designation. Under the CPU, the IBT would be applied in portions of the community adjacent to the border, POE, or areas in transition to higher intensity industries. Under the Reduced Density Alternative, areas designated as IBT would instead be designated as Light industrial, thereby excluding business park use types, which would serve to reduce the trip generation rates in these areas.

Under this alternative, the maximum number of permitted residential units within the Southwest Village would be reduced from 5,880 to 3,850. The maximum number of permitted residential units within the Central Village would be reduced from 5,246 to 1,940. The permitted densities under the Reduced Density Alternative are consistent with the City of San Diego’s Transit Oriented Development (TOD) Guidelines. Densities under this alternative are assigned based on proximity to future transit (i.e., areas closest to transit would have a density of 25 du’s/ac; areas slightly further away would have a density of 12/ac, and areas well beyond transit service would have a density of 7/ac.)



No Scale



FIGURE 10-3
Reduced Density Alternative

Buildout projections for the Reduced Density Alternative compared to the CPU are shown below in Table 10-4.

**TABLE 10-4
COMPARISON OF REDUCED DENSITY ALTERNATIVE WITH CPU**

Land Use Categories	Reduced Density Alternative ¹	CPU ²
Residential	813 ac/ 13,438 du	813 ac/ 18,774 du
Commercial	284ac/ 3,917,000 sq. ft. ³	284ac/ 3,917,000 sq. ft. ³
Village Centers	560ac/ 5,790	560ac/ 11,126 du
Industrial	2,528ac/ 54,461,000 sq. ft. ³ (No IBT)	2,528ac/ 54,461,000 sq. ft. ^{3,4} (IBT with CPIOZ)
Institutional	1,125ac	1,125ac
Parks	153ac	153ac
Open Space	2,837ac	2,837ac
Right-of-Way	1,023ac	1,023ac
ADT	910,435¹	1,045,025³
TOTAL	9,326ac	9,326ac

¹SOURCE: City of San Diego

²SOURCE: City of San Diego Draft CPU Land Use Map, September 10, 2013

³SOURCE: Urban Systems. Transportation Analysis for the OMCPU, June 2012

ac = acre; du = dwelling unit; sq. ft. = square feet.

⁴Industrial Uses under the CPU include Heavy and Light industrial, IBT and Business Park land use categories

10.2.3.1 Land Use

The Reduced Density Alternative would convert all IBT designated lands to Light Industrial, thereby reducing potential impacts associated with the adjacency of nonindustrial and industrial uses. However, some beneficial features of the CPU would not occur. These include new specific land use designations (e.g., International Business and Trade and Business Park – Residential Permitted). As such, the goals and objectives of both the CPU and the General Plan would not be achieved to the same extent as under the CPU. Impacts associated with the City's MHPA Adjacency Guidelines would be similar under both this alternative and the CPU. Additionally, the Reduced Density Alternative would result in buildout of fewer dwelling units and less commercial/retail and industrial acreage, and therefore, allow for less grading or ground disturbing activity, which would reduce conflicts with the purpose and intent of the ESL Regulations and the Historical Resources Regulations of the LDC when compared to the CPU. As with the CPU, this alternative would result in significant impacts associated with biological and historical resources which would be reduced to below a level of significance at the program level with implementation of the Mitigation Framework which requires regulatory compliance with the LDC and all applicable standards and guidelines. Therefore, impacts related to Land Use compliance under this alternative would be similar to or less than the CPU.

10.2.3.2 Landform Alteration/Visual Quality

Within the primarily developed western third of the CPU area, the Reduced Density Alternative would result in roughly the same visual quality impacts as the CPU. This is because the residential land use patterns in the Reduced Density Alternative would be similar to the CPU, although residential land uses would be constructed to a higher intensity under the CPU within the southwest quadrant as compared to the Reduced Density Project Alternative. However, unlike the CPU, the Reduced Density Alternative would not allow for the collocation of light industrial and business park uses within the eastern industrial areas, as no IBT land use designation would occur under this alternative. The CPU would ensure the compatibility of development with the IBT through implementation of the CPIOZ. Therefore, from an overall visual perspective of the built out community, the aesthetic impacts under this alternative would be similar to those identified for the CPU.

10.2.3.3 Air Quality/Odor

Overall, the Reduced Density Alternative would construct fewer residences than the CPU and would not allow for the IBT land use designation, thereby generating approximately 100,000 fewer trips when compared to the CPU. In addition, under the Reduced Density Alternative, village centers with transit stations would still be created, but at a lesser intensity. As such, the goals of reducing trips and air emissions contained in the City of Villages strategy would be achieved under the Reduced Density Alternative, albeit to a lesser extent than under the CPU.

Like the CPU, the Reduced Density Alternative would not be consistent with the adopted community plan land use designations upon which the RAQS and SIP were based; however, the changes in the land uses under both this alternative and the CPU would result in reduced traffic, and in turn, fewer emissions than under the adopted Community Plan. Therefore, neither the Reduced Density Alternative nor the CPU would obstruct or conflict with the implementation of the San Diego RAQS or applicable portions of the SIP, and impacts would be the same for both.

Impacts associated with both construction and operational emissions of criteria pollutants under the Reduced Density Alternative would be less than those identified for the CPU. Under the Reduced Density Alternative, total ROG, NO_x, CO, SO, PM₁₀ and PM_{2.5} emissions would be less than emissions under the CPU. The Reduced Density Alternative would include a similar number of industrial uses (stationary emission sources), and truck traffic (diesel emissions), and fewer ADT volume than the CPU. Therefore, by comparison, the Reduced Density Alternative would result in fewer impacts than the CPU relative to air quality. Despite the reduction in ADT under this alternative, development would still occur relative to residential, commercial and industrial land uses, and therefore, impacts associated with stationary sources and collocation would remain significant and unavoidable as with the CPU.

10.2.3.4 Biological Resources

The Reduced Density Alternative would have a similar development footprint as the CPU. Therefore, the extent of biological impacts from the Reduced Density Alternative would be similar to that under the CPU, as the amount of preserved open space and extent of disturbance from future development would be approximately the same. The types of impacts to sensitive resources, habitat, and species also would be similar. As with the CPU, projects implemented under this alternative that are consistent with the CPU, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that are no biological resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of a focused Biological Survey prepared by a qualified biologist in accordance with the City's Biology Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Biological Resources. Like the CPU, strict adherence to the Mitigation Framework would still be required to reduce potential impacts to below a level of significance.

10.2.3.5 Historical Resources

Since the CPU area includes known historical and prehistoric resources (see Section 5.5), future development has the potential to result in significant direct and/or indirect impacts to cultural or historical resources for both the Reduced Density Alternative and the CPU. As with the CPU, implementation of this alternative would require adherence to all applicable, federal, state, and local regulations regarding the protection of historical resources, as further described in Section 5.5. The extent of impacts to historical resources resulting from implementation of the Reduced Density Alternative would be similar to those identified for the CPU because the extent and areas of disturbance by development would be generally the same, only the land use designation would change.

As with the CPU, implementation of the Reduced Density Alternative would result in potentially significant impacts related to historical resources at the program-level. It should be noted however, that under both this alternative and the CPU future development in areas designated for commercial and industrial uses on properties that have not been previously graded, or have been graded but have not otherwise developed, would be subject to review in accordance with the supplemental regulations for CPIOZ Type A (ministerial). For these project types that are consistent with the OMCP, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that are no archaeological resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of an Archaeological Survey prepared by a qualified archaeologist in accordance with the City's Historical Resources Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance

with CPIOZ Type B and the Mitigation Framework for Historical Resources. As such, future development proposals implementing this alternative or the CPU would be required to incorporate the Mitigation Framework for Historical Resources adopted in conjunction with the certification of this PEIR. With adherence to the mitigation framework, the program-level impacts related to prehistoric or historical archaeological sites would be reduced to below a level of significance.

10.2.3.6 Human Health/Public Safety/Hazardous Materials

Because the Reduced Density Alternative would segregate non-industrial land use from industrial uses to a greater extent than under the CPU through eliminating the IBT, the risk of exposure to hazardous materials would be slightly less under this alternative, although the development footprint for the land uses under this alternative would remain the same. The identification and treatment of hazardous materials within the CPU area relative to this alternative would be required to comply with all applicable federal, state, and local regulations regarding hazardous materials siting, assessment, and remediation. Strict compliance with all applicable regulations would preclude the potential for impacts under both this alternative and the CPU.

The Reduced Density Alternative and the CPU would have similar development footprints, and therefore, would be subject to similar hazards related to wildfires. Wildfire hazard impacts would be significant, but would still be subject to the same regulations for compliance as with the CPU. Impacts under this category resulting from implementation of the Reduced Density Alternative would be similar to those associated with the CPU. Development and grading would still occur relative to residential, commercial and industrial land uses, and therefore, impacts associated with hazardous sites, substances, health hazards, wildfire hazards and aircraft hazards would be similar or slightly less than the CPU. However, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.3.7 Hydrology and Water Quality

Although the residential densities and industrial use categories for the Reduced Density Alternative differ slightly from the CPU, the area to be developed is roughly similar. The Reduced Density Alternative would preserve a similar amount of open space as with the CPU; therefore, this alternative would result in similar impacts associated with hydrology, flooding and water quality. Despite this reduction, future development under both the Reduced Biological Impacts Alternative and the CPU would still be required to comply with existing local, state and federal regulations relative to runoff and water quality. Therefore, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.3.8 Geology/Soils

Impacts associated with geology and soils resulting from implementation of the Reduced Density Alternative would be similar to those identified for the CPU. As with the CPU, implementation of the Reduced Density Alternative has the potential to result in significant impacts related to geologic hazards associated with unstable conditions related to compressible soils, landslides, seismicity (faults), and expansive soils. Future development under both the Reduced Density Alternative and the CPU would be required to comply with all applicable local, state, and federal regulations relative to engineering design and construction. Therefore, strict compliance with all applicable local, state, and federal regulations and implementation of the Mitigation Framework would preclude the potential for impacts under both this alternative and the CPU.

10.2.3.9 Energy Conservation

Development under the Reduced Density Alternative would result in less energy demand for both electricity and natural gas when compared to the CPU, because fewer residential units would be constructed. Similar to the CPU, the Reduced Density Alternative would not result in the use of excessive amounts of fuel or other forms of energy during construction. Also, this alternative, like the CPU, is not anticipated to result in a need for new electrical systems or require substantial alteration of existing utilities, which would create physical impacts. Based on the program-level analysis of both the CPU and the Reduced Density Alternative, impacts associated with energy use would be similar, although slightly less under the reduced density alternative, and less than significant.

10.2.3.10 Noise

Noise impacts resulting from implementation of the Reduced Density Alternative would be less than those identified for the CPU relative to stationary noise sources. Fewer areas of collocation would occur under the Reduced Density Alternative because no IBT land use designation is included, and, therefore, the potential for noise sensitive land uses to be exposed to excessive noise would be less than under the CPU.

Implementation of the Reduced Density Alternative would result in less traffic, thereby resulting in less traffic-related noise than would occur under the CPU. Therefore, existing sensitive receptors may experience fewer noise impacts from transportation-related noise sources under the Reduced Density Alternative. Stationary and traffic-related noise impacts would still likely be significant and unavoidable for the Reduced Density Alternative, as anticipated for the CPU.

10.2.3.11 Paleontological Resources

As discussed in Section 5.11 (Paleontological Resources), future development has the potential to result in significant direct and/or indirect impacts to paleontological fossil resources for both the Reduced Density Alternative and the CPU. As with the CPU, implementation of this alternative would require adherence to all applicable guidelines further described in Section 5.11. The extent of impacts to paleontological resources resulting from implementation of the Reduced Density Alternative would be similar to those identified for the CPU because the extent and areas of disturbance by development would be generally the same, only the land use designation would change. As with the CPU, implementation of the Reduced Density Alternative would result in potentially significant impacts related to paleontological resources at the program-level. It should be noted however, that under both this alternative and the CPU future development in areas designated for commercial and industrial uses on properties that have not been previously graded, or have been graded but have not otherwise developed, would be subject to review in accordance with the supplemental regulations for CPIOZ Type A (ministerial). For these project types that are consistent with the OMCP, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that there are no archaeological resources present on the project site; the project can be processed ministerially and would not be subject to further environmental review under CEQA. This requires submittal of a Paleontological Letter prepared by a qualified paleontologist in accordance with the City's Paleontology Guidelines. Development proposals that do not comply with the CPIOZ Type A supplemental regulations would be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework for Paleontological Resources. As for the CPU, strict adherence to the Mitigation Framework would still be required to reduce potential impacts to below a level of significance.

10.2.3.12 Traffic/Circulation

Impacts associated with the Reduced Density Alternative are addressed qualitatively in this analysis. According to data generated by the City, the Reduced Density Alternative would generate approximately 135,000 fewer trips than the CPU. This would result in fewer impacts relative to traffic capacity, access and circulation than would occur under the CPU. However, due to the changes in land use and increased intensity of development relative to the existing condition, it is anticipated that the Reduced Density Alternative like the CPU would result in traffic/circulation and capacity impacts, which would remain significant and unavoidable.

Traffic hazards and circulation and access impacts for the Reduced Density Alternative would be similar to those for the CPU. Pedestrian orientation would be similarly emphasized under the Reduced Density Alternative, which is based on TOD guidelines; therefore, it is not anticipated to result in a significant impact relative to alternative transportation.

Therefore, the Reduced Density Alternative traffic hazards and alternative transportation impacts would be less than significant and similar to the CPU.

10.2.3.13 Public Services

The demand for law enforcement, fire protection, educational services, libraries, and parks resulting from implementation of the Reduced Density Alternative would be similar, although slightly less than those identified for the CPU, as there would be a smaller buildout resident population. As such, the demand for new facilities would be slightly less under this alternative. Impacts related to construction of new facilities under the Reduced Density Alternative would be considered at the time site-specific design plans are available at the project-level, similar to the CPU; therefore, this alternative would not result in a significant impact, similar to the CPU.

10.2.3.14 Utilities

Like the CPU, buildout of the Reduced Density Alternative would increase the demand for water, wastewater and recycled water services, but to a lesser extent. Improvements to water and recycled water systems have been previously identified in master planning documents. No additional facilities would be necessitated as a result of buildout of the Reduced Density Alternative. The physical impacts from these improvements would be evaluated under CEQA once site-specific design plans are available. Therefore, impacts associated with water and recycled water system improvements would be less than significant at the program-level.

Like the CPU, buildout of the Reduced Density Alternative would not directly result in the need for a new landfill. However, compliance with the Storage, Recycling, and C&D ordinances alone would result in only a 40 percent diversion rate within in the CPU area. As with the CPU, future discretionary projects (that meet the threshold) would be required to prepare a waste management plan with site-specific waste reduction measures in order to meet the State-mandated 75 percent diversion rate. Because all future projects within the CPU area may not be required to prepare a waste management plan or may not reduce project-level waste management impacts below a level of significance, the Reduced Density Alternative cannot be guaranteed, at the program-level, to meet the 75 percent diversion requirement. Direct impacts associated with solid waste would be significant and unavoidable at the program-level, similar to the CPU.

Additionally, under this alternative like the CPU, future projects would be required to design and build storm water infrastructure systems to accommodate new development within the CPU area. Under this alternative, although the development footprint would remain the same, the IBT land use designation would convert to Light Industrial and permitted residential densities would be reduced; storm water infrastructure would still be required.

Although the specific location and design details for future storm water infrastructure improvements are unknown at this time, all projects would be reviewed for consistency with the City's Storm Water Standards and designed satisfactory to the City Engineer. Therefore, strict adherence to existing storm water regulations, conformance with General Plan and CPU policies, and implementation of the Mitigation Framework which requires future review under CEQA would assure that impacts associated with the need for construction of future storm water infrastructure under both this alternative and the CPU would be less than significant.

10.2.3.15 Water Supply

The Reduced Density Alternative, like the CPU, is consistent with water demand assumptions included in the regional water resource planning documents of the SDCWA and MWD. Appendices M-2 and M-3 (Water Supply Assessment Reports) demonstrate that there would be sufficient water to supply future development in accordance with the CPU. Because the Reduced Density Alternative would convert one land use designation to a less intense use category and yield fewer units than the CPU, there would be adequate water supply under this alternative and therefore, impacts would be less than significant.

10.2.3.16 Population and Housing

The Reduced Density Alternative would result in buildout of fewer dwelling units (13,438 dwelling units) relative to the CPU (18,774). Like the CPU, the Reduced Density Alternative would create mixed-use village centers where residential uses would be integrated with employment and commercial uses, but with less intensity of residential uses than under the CPU. Thus, the population and economic prosperity goals and objectives of both the General Plan, and SANDAG's RCP would be achieved. Neither the Reduced Density Alternative, nor the CPU would result in substantial, unanticipated population growth or conflict with the City's affordable housing regulations. As with the CPU, this alternative would be growth accommodating, rather than growth inducing and therefore, impacts would be less than significant under both the Reduced Density Alternative and the CPU.

10.2.3.17 Agriculture/Mineral Resources

a. Agriculture

The adopted Community Plan does not designate land for agricultural land uses, thus no planned long-term agriculture would be eliminated upon full build out of either the CPU or the Reduced Density Alternative. Therefore, both the Reduced Density Alternative and the CPU would result in less than significant impacts to agriculture.

b. Mineral Resources

The Reduced Density Alternative would have a similar grading footprint as the CPU, thus there are no significant mineral resources that would be impacted under this alternative. Therefore, both the Reduced Density Alternative and the CPU would result in less than significant impacts to mineral resources.

10.2.3.18 Greenhouse Gas Emissions

Like the CPU, the Reduced Density Alternative would introduce higher density residential and commercial land use designations, as well as several new mixed-use and industrial land use designations, which would in turn, reduce VMT, as compared to the No Project Alternative. However, GHG emissions associated with the Reduced Density Alternative would be less than those associated with the CPU, because of the reduced intensity of development, fewer residential units, and fewer associated ADT. While future development proposals would be required to implement GHG emission reduction measures under both the Reduced Density Alternative and the CPU, buildout in either case would result in impacts associated with the contribution of GHG emissions to cumulative statewide emissions that would be considered significant and unavoidable at the program-level.

10.2.3.19 Conclusion Regarding the Reduced Density Alternative

Implementation of the Reduced Density Alternative would not avoid any of the significant and unavoidable impacts of the CPU (i.e., air quality (RAQS, Stationary sources/collocation), noise (traffic, construction and stationary sources), traffic/circulation, utilities (solid waste), and greenhouse gas emissions. However, this alternative would generate fewer ADT due to the reduced intensity of residential development within the villages, and thus impacts from traffic congestion (such as, air quality, noise, and greenhouse gas emissions) would be incrementally reduced from the CPU. Impacts associated with hazardous materials would be slightly less under the Reduced Density Alternative due to the removal of the IBT land use designation.

The Reduced Density Alternative generally meets project objectives. The alternative replaces the IBT land use designation with light industrial, which is more restrictive, and therefore, does not allow for a full range of industrial uses. The IBT designation better implements General Plan and CPU goals relative to a subregional employment center.

The Reduced Density Alternative also lessens the intensity of residential development within both Villages. Greater density within the village areas, such as that proposed under the CPU, better implements General Plan and CPU goals for compact communities, a wider range of housing types, affordability, greater transit opportunities, etc. The Reduced Density alternative would allow for more suburban-type development, which could be more auto-centric, and contribute to, rather than reduce GHG impacts.

Additionally, although this alternative would reduce density; the development footprint within the CPU would remain generally the same, and therefore result in similar areas requiring grading and ground disturbance as with the CPU. Therefore, this alternative would have similar, or in some cases less impacts to biological resources, historical resources, hydrology/water quality, human health/public safety/hazardous materials, utilities (including solid waste), and paleontological resources depending on the location and development footprint. As with the CPU, strict adherence to the applicable Mitigation Framework for each issue area would reduce potential impacts to below a level of significance.

10.3 Environmentally Superior Alternative

State CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify which alternative is the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify which of the other alternatives is environmentally superior. Based on this CEQA Guidance and the analysis further detailed in Chapter 10 of the PEIR, the Reduced Biological Impacts Alternative would be considered environmentally superior because it would preserve more open space and, therefore, result in fewer impacts to biological, archaeological, and paleontological resources; hydrology/water quality; human health/public safety/hazardous materials, and utilities (including solid waste), resulting from a decrease in developable land that could be graded. It also would reduce (but not avoid) the significant and unavoidable impacts of the CPU (i.e., air quality (RAQS, stationary sources/collocation), noise (traffic, construction and stationary sources), traffic/circulation, utilities (solid waste), and greenhouse gas emissions.

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11.0 Mitigation Monitoring and Reporting Program

Section 21081.6 of the CEQA Guidelines requires that a mitigation, monitoring, and reporting program be adopted upon certification of an EIR to ensure that the mitigation measures are implemented. The mitigation monitoring and reporting program specifies what the mitigation is, the entity responsible for monitoring the program, and when in the process it should be accomplished.

The CPU is described in this PEIR. The PEIR, incorporated herein as referenced, focused on issues determined to be potentially significant by the City. The issues addressed in the PEIR include land use; transportation/circulation; air quality/odor; agriculture/mineral resources; noise; historical resources; visual effects/neighborhood character; human health/public safety/hazardous materials; hydrology/water quality; water supply; population and housing; utilities; public services; geology/soils; paleontological resources; energy conservation; biological resources; and greenhouse gas emissions.

Public Resources Code section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. After analysis, potentially significant impacts requiring mitigation were identified for land use; air quality; biological resources; historical resources; human health/public safety/hazardous materials; hydrology/water quality; geology/soils; noise; paleontological resources; transportation/circulation; utilities; and greenhouse gas emissions.

The environmental analysis resulted in the identification of a mitigation framework which would reduce potentially significant impacts, but not to below a level of significance for all environmental issue areas noted above. Specifically, mitigation measures for significant impacts related to Air Quality (RAQS, stationary sources/collation), Transportation/Circulation, Utilities (solid waste), Noise (traffic/stationary sources) and Greenhouse Gas Emissions were identified, but impacts the program-level remains significant and unavoidable, even with adherence to the Mitigation Framework.

The mitigation monitoring and reporting program for the CPU is under the jurisdiction of the City and other agencies as specified in below. The mitigation monitoring and reporting program for the CPU addresses only the issue areas identified above as significant. The following is an overview of the mitigation monitoring and reporting program to be completed for the CPU.

11.1 Land Use

11.1.1 Regulation Consistency

a. Environmentally Sensitive Lands Regulations

Impact

The development footprint of the CPU would encroach into sensitive ESL areas. Future public and private development proposals would be required to comply with the ESL Regulations or process a Site Development Permit in order to deviate from the regulations. Additionally, all subsequent projects would be subject to review in accordance with CEQA. At which time, appropriate site-specific mitigation in accordance with the Mitigation Framework measures LU-2 and BIO-1 through BIO-5-4 would be identified for impacts to sensitive biological resources covered under the ESL. For other resource areas covered under the ESL Regulations, such as steep hillsides and floodplains, future projects would be designed to ensure compliance with the supplemental regulations and any other regulatory requirements to ensure that no impacts would occur. The CPU also includes several policies (see Table 5.4-5) which aim to reduce impacts to sensitive and other resources covered under the ESL Regulations as well as development regulations required for projects within areas covered by CPIOZ Type A, which address sensitive biological resources. Future projects would be required to comply with the above regulations, policies, and mitigation. Therefore, at the program-level the CPU would not be in conflict with the purpose and intent of the ESL regulations and potential impacts would be below a level of significance.

Mitigation Framework

LU-1a: Future development project types that are consistent with the CPU, base zone regulations, and the supplemental regulations for CPIOZ Type A and can demonstrate that there are no biological resources present on the project site can be processed ministerially and would not be subject to further environmental review under CEQA. Development proposals that do not comply with the CPIOZ Type A supplemental regulations shall be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework LU-2 and BIO 1-4 in Section 5-4, Biological Resources.

b. Historical Resources Regulations

Impact

Given the presence of historical resources distributed throughout the CPU area, implementation of the CPU has the potential to result in significant impacts to historical resources. The CPU includes several policies aimed to reduce impacts to historical resources within the CPU area as well as development regulations required for projects

within areas covered by CPIOZ Type A which address archaeological resources. Additionally, incorporation of the mitigation framework for historical resources contained in Section 5.5 would reduce the potential for significant impacts at the project-level.

Mitigation Framework

LU-1b: Future development project types that are consistent with the CPU, base zone regulations, and the supplemental regulations for CPIOZ Type A and can demonstrate that there are no archaeological resources present on the project site can be processed ministerially and would not be subject to further environmental review under CEQA. Development proposals that do not comply with the CPIOZ Type A supplemental regulations shall be subject to discretionary review in accordance with CPIOZ Type B and the Mitigation Framework HIST-1 in Section 5-5, Historical Archaeological Resources.

11.1.2 Environmental Plan Consistency

a. MHPA

Impact

Potential indirect impacts would be evaluated at the project-level for consistency with the MHPA Land Use Adjacency Guidelines. Implementation of the CPU would introduce land uses adjacent to MHPA which would potentially result in a significant impact at the program-level.

Mitigation Framework

LU-2: All subsequent development projects implemented in accordance with the CPU which is adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Mitigation measures include, but are not limited to: sufficient buffers and design features, barriers (rocks, boulders, signage, fencing, and appropriate vegetation) where necessary, lighting directed away from the MHPA, and berms or walls adjacent to commercial or industrial areas and any other use that may introduce construction noise or noise from future development that could impact or interfere with wildlife utilization of the MHPA. The project biologist for each proposed project would identify specific mitigation measures needed to reduce impacts to below a level of significance. Subsequent environmental review would be required to determine the significance of impacts from land use adjacency and compliance with the Land Use Adjacency Guidelines of the MSCP. Prior to approval of any subsequent development project in an area adjacent to a designated MHPA, the City of San Diego shall identify specific conditions of approval in order to avoid or to reduce potential impacts to adjacent the MHPA.

11.0 Mitigation Monitoring and Reporting Program

Specific requirements shall include:

- Prior to the issuance of occupancy permits, development areas shall be permanently fenced where development is adjacent to the MHPA to deter the intrusion of people and/or pets into the MHPA open space areas. Signage may be installed as an additional deterrent to human intrusion as required by the City.
- The use of structural and nonstructural best management practices (BMPs), including sediment catchment devices, shall be required to reduce the potential indirect impacts associated with construction to drainage and water quality. Drainage shall be directed away from the MHPA or, if not possible, must not drain directly into the MHPA. Instead, runoff shall flow into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA. Drainage shall be shown on the site plan and reviewed satisfactory to the City Engineer.
- All outdoor lighting adjacent to open space areas shall be shielded to prevent light over-spill off-site. Shielding shall consist of the installation of fixtures that physically direct light away from the outer edges of the road or landscaping, berms, or other barriers at the edge of development that prevent light over spill.
- The landscape plan for the project shall contain no exotic plant/invasive species and shall include an appropriate mix of native species which shall be used adjacent to the MHPA.
- All manufactured slopes must be included within the development footprint and outside the MHPA.
- All brush management areas shall be shown on the site plan and reviewed and approved by the Environmental Designee. Zone 1 brush management areas shall be included within the development footprint and outside the MHPA. Brush management Zone 2 may be permitted within the MHPA (considered impact neutral) but cannot be used as mitigation. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area shall be the responsibility of a homeowners association or other private party.
- Access to the MHPA, if any, shall be directed to minimize impacts and shall be shown on the site plan and reviewed and approved by the Environmental Designee.
- Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such

measures shall include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement shall be incorporated into leases on publicly owned property as leases come up for renewal.

11.2 Air Quality

11.2.1 Regional Air Quality Standards

Impact

a. Construction Emissions

As demonstrated by the analysis of hypothetical projects, air emissions due to construction would not exceed the applicable thresholds. However, if several of these projects were to occur simultaneously, there is the potential for multiple projects to exceed significance thresholds.

The projects discussed above are illustrative only. Approval of the CPU would not permit the construction of any individual project, and no specific development details are available at this time. The thresholds presented above are applied on a project-by-project basis and are not necessarily intended for assessment of impacts from large or regional plans. The information is presented to illustrate the potential scope of air impacts for projects that would be developed under the plan. While it is not anticipated that construction activities under the CPU would result in significant air quality impacts, as air emissions from the future developments within the CPU area cannot be adequately quantified at this time, this impact would be significant.

b. Operational Emissions

While emissions under the CPU would exceed project-level thresholds, which would potentially have a significant air quality impact when compared to the existing condition, the CPU would result in lower emissions than the adopted plan.

The CPU would be consistent with adopted regional air quality improvement plans and would represent a decrease in emissions used to develop the SDAPCD RAQS. However, as air emissions from the future developments within the CPU area cannot be adequately quantified at this time, this impact would be significant.

Mitigation Framework

AQ-1: For projects that would exceed daily construction emissions thresholds established by the City of San Diego, best available control measures/technology shall be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Best available control measures/technology shall include:

- a. Minimizing simultaneous operation of multiple pieces of construction equipment;
- b. Use of more efficient or low pollutant emitting, equipment, e.g. Tier III or IV rated equipment;
- c. Use of alternative fueled construction equipment;
- d. Dust control measures for construction sites to minimize fugitive dust, e.g. watering, soil stabilizers, and speed limits; and
- e. Minimizing idling time by construction vehicles.

AQ-2: Development that would significantly impact air quality, either individually or cumulatively, shall receive entitlement only if it is conditioned with all reasonable mitigation to avoid, minimize, or offset the impact. As a part of this process, future projects shall be required to buffer sensitive receptors from air pollution sources through the use of landscaping, open space, and other separation techniques.

11.2.2 Sensitive Receptors

a. Stationary Sources

Impact

The CPU includes industrial uses which could generate air pollutants. Without appropriate controls, air emissions associated with planned industrial uses would represent a significant adverse air quality impact.

Any new facility proposed that would have the potential to emit toxic air contaminants would be required to evaluate toxic air problems resulting from their facility's emissions.

If the facility poses a potentially significant public health risk, the facility would submit a risk reduction audit and plan to demonstrate how the facility would reduce health risks. Specific project-level design information would be needed to determine stationary source emission impacts. Therefore, at the program-level, impacts would be potentially significant.

Mitigation Framework

AQ-3: Prior to the issuance of building permits for any new facility that would have the potential to emit toxic air contaminants, in accordance with AB 2588, an emissions inventory and health risk assessment shall be prepared. If adverse health impacts exceeding public notification levels (cancer risk equal to or greater than 10 in 1,000,000; see Section 4.5.4.1(b)) are identified, the facility shall provide public notice to residents located within the public notification area and submit a risk reduction audit and plan to the APCD that demonstrates how the facility would reduce health risks to less than significant levels within five years of the date the plan.

b. Collocation

Impact

The CPU would place residential, commercial, and industrial uses in proximity to one another, which would have potential air quality impacts associated with the collocation of incompatible land uses, as described in section 5.3.5.1 (d). Air quality impacts would be associated with exposure to pollutants from the operation of the facility, which can include DPM emitted by heavy trucks and diesel engines, chromium emitted by chrome platers, and perchloroethylene emitted by dry cleaning operations. The CPU contains policies and performance standards to avoid and/or reduce potential impacts associated with collocation of diverse land uses. Future development projects would be required to comply with the collocation policies of the General Plan and CPU, which are necessary to reduce or avoid potential air quality impacts. These policies and standards would include but not be limited to the special policies and performance standards for residential-industrial interface areas, truck circulation, and industrial design, as well as the relevant and mandatory air district, state, and federal controls on toxic air emission sources. While compliance with the CPU and General Plan policies, along with local, state, and federal regulations would reduce potential impacts, future projects may result in sensitive uses (residential uses, schools, parks) being located within the buffer distances of the facilities described in Table 5.3-7, and therefore sensitive receptors would be exposed to toxic air emissions. In this case, impacts would be significant.

Mitigation Framework

AQ-4: Prior to the issuance of building permits for any project containing a facility identified in Table 5.3-7, or locating air quality sensitive receptors closer than the recommended buffer distances, future projects implemented in accordance with the CPU shall be required to prepare a health risk assessment (HRA) with a Tier I analysis in accordance with APCD HRA Guidelines and the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics "Hot Spots" Program Risk Assessment Guidelines (APCD 2006; OEHHA 2003).

All HRAs shall include:

1. the estimated maximum 70-year lifetime cancer risk,
2. the estimated maximum non-cancer chronic health hazard index (HHI), and
3. the estimated maximum non-cancer acute health hazard index (HHI).

Risk estimates shall each be made for the off-site point of maximum health impact (PMI), the maximally exposed individual resident (MEIR), and the maximally exposed individual worker (MEIW). The location of each of these receptors shall be specified. The lifetime cancer risk, non-cancer chronic and acute health hazard indexes for nearby sensitive receptors shall also be reported. Cancer and non-cancer chronic risk estimates shall be based on inhalation risks. HRAs shall include estimates of population exposure, including cancer burden, as well as cancer and noncancer chronic and acute risk isopleths (contours). The HRA shall identify best available control technology (BACT) required to reduce risk to less than 10 in 1,000,000.

11.3 Biological Resources

11.3.1 Sensitive Plants and Animals

Impact

Implementation of the CPU has the potential to impact sensitive plant and wildlife species directly through the loss of habitat or indirectly by placing development adjacent to MHPA. Impacts would be significant.

Mitigation Framework

BIO-1: To reduce potentially significant impacts that would cause a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the CPU area, all subsequent projects implemented in accordance with the CPU shall be analyzed in accordance with the CEQA Significance Thresholds, which require that site-specific biological resources surveys be conducted in accordance with City of San Diego Biology Guidelines (2012). The locations of any sensitive plant species, including listed, rare, and narrow endemic species, as well as the potential for occurrence of any listed or rare wildlife species shall be recorded and presented in a biological resources report. Based on available habitat within CPU area, focused presence/absence surveys shall be conducted in accordance with the biology guidelines and applicable resource agency survey protocols to determine the potential for impacts resulting from the future projects on these species. Engineering design specifications based on project-level grading and site plans shall be incorporated into the design of future projects to minimize or eliminate direct

impacts on sensitive plant and wildlife species consistent with the FESA, MBTA, Bald and Golden Eagle Protection Act, California Endangered Species Act (CESA), MSCP Subarea Plan, and ESL Regulations.

In addition to the requirements detailed above, specific measures shall be implemented when the biological survey results in the identification of Burrowing Owls on the project site. Future projects shall be required to conduct a habitat assessment to determine whether or not protocol surveys are needed. Should burrowing owl habitat or sign be encountered on or within 150 meters of the project site, breeding season surveys shall be conducted. If occupancy is determined, site-specific avoidance and mitigation measures shall be developed in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Measures to avoid and minimize impacts to burrowing owl shall be included in a Conceptual Burrowing Owl Mitigation Plan which includes take avoidance (pre-construction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts.

Mitigation for Impacts to Sensitive Upland Habitats

Future projects implemented in accordance with the CPU resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the City Biology Guidelines and MSCP Subarea Plan and provide suitable mitigation in accordance with the City's Biology Guidelines (see Table 5.4-7) MSCP Subarea Plan. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, oak woodlands, coastal sage scrub, and chaparral consistent with federal, state, and City guidelines. Any required mitigation for impacts on sensitive vegetation communities shall be outlined in a conceptual mitigation plan following the outline provided in the City Biology Guidelines.

Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed. Project-level analysis shall determine whether the impacts are within or outside of the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.

Mitigation for impacts to sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the City's Biology Guidelines (City of San Diego 2012a). These mitigation ratios are based on Tier level of the vegetation community, the location of the impact and the location of the mitigation site(s). For example, impacts to lands inside of the MHPA and mitigated outside the MHPA would have the highest mitigation ratio whereas impacts to lands outside the MHPA and mitigated inside the MHPA would have the lowest mitigation ratio.

11.0 Mitigation Monitoring and Reporting Program

If mobility element roads (i.e., Beyer Boulevard, Airway Road, and Del Sol Boulevard) impact existing conserved lands, an additional 1:1 ratio shall be added to the City required mitigation ratio in order to replace the lands that were previously preserved as open space. Mitigation lands purchased to compensate for impacts to areas within conserved lands shall be located in the Otay Mesa area if feasible.

MITIGATION RATIOS FOR IMPACTS TO UPLAND VEGETATION COMMUNITIES AND LAND COVER TYPES

Tier	Habitat Type	Mitigation Ratios			
TIER 1 (rare uplands)	Southern Foredunes	Location of Preservation			
	Torrey Pines Forest			Inside	Outside
	Coastal Bluff Scrub	Location of Impact	Inside*	2:1	3:1
	Maritime Succulent Scrub		Outside	1:1	2:1
	Maritime Chaparral				
	Scrub Oak Chaparral				
	Native Grassland				
	Oak Woodlands				
TIER (uncommon uplands)	II Coastal Sage Scrub Coastal Sage Scrub/ Chaparral	Location of Preservation			
				Inside	Outside
		Location of Impact	Inside*	1:1	2:1
			Outside	1:1	1.5:1
TIER III A (common uplands)	Mixed Chaparral Chamise Chaparral	Location of Preservation			
				Inside	Outside
		Location of Impact	Inside*	2:1	3:1
			Outside	1:1	2:1
TIER III B (common uplands)	Non-Native Grasslands	Location of Preservation			
				Inside	Outside
		Location of Impact	Inside*	1:1	1.5:1
			Outside	0.5:1	1:1

Notes:

For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

For impacts on Tier II, IIIA, and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I – III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

Project-specific mitigation will be subject to applicable mitigation ratios at the time of project submittal.

Mitigation for Impacts to Wetlands

Please refer to Mitigation Framework BIO-4.

Mitigation for Short-term Impacts to Sensitive Species from Project Construction

Specific measures necessary for reducing potential construction-related noise impacts to the coastal California gnatcatcher, least Bell's vireo burrowing owl, and the cactus wren are further detailed in LU-2 and BIO-2.

11.3.2 Migratory Wildlife

Impact

Future development, including construction or extension of CPU Mobility Element roadways, utility lines, and/or temporary construction activities within the MHPA, has the potential to interfere with nesting, reduce foraging habitat, and obstruct wildlife movement as a result of noise, construction activities, habitat loss and/or fragmentation. Any direct or indirect impacts to migratory wildlife nesting, foraging, and movement would be significant.

Mitigation Framework

BIO-2: Mitigation for future projects to reduce potentially significant impacts that would interfere with the nesting, foraging, or movement of wildlife species within the CPU area, shall be identified in site-specific biological resources surveys prepared in accordance with City of San Diego Biology Guidelines as further detailed in BIO-1 during the discretionary review process. The Biology Report shall include results of protocol surveys and recommendations for additional measures to be implemented during construction-related activities; shall identify the limits of any identified local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities (e.g., non-native grassland to riparian or agricultural to developed land) to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor.

Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting or foraging activities shall be addressed in the Biology report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species specific mitigation plans (such as a Burrowing Owl Mitigation Plan) in order to comply with the FESA, MBTA, Bald and Golden Eagle Protection Act, State Fish and Wildlife Code, and/or the ESL Regulations.

11.3.3 Sensitive Habitat

Impact

Impacts to Tier I, II, IIIA, and IIIB habitats would be significant. These sensitive habitats include: maritime succulent scrub, native grassland, Diegan coastal sage scrub, southern mixed chaparral, non-native grassland, riparian scrub, vernal pools, and basins with fairy shrimp. Impacts to wetlands are discussed in Section 5.4.9.

Mitigation Framework

Please refer to Mitigation Framework BIO-1.

11.3.4 MSCP

Impact

(ISSUE 4) Please refer to Significance of Impact LU-2.

Mitigation Framework

Please refer to Mitigation Framework LU-2.

11.3.5 Invasive Plants

Impact

(ISSUE 5) Please refer to Significance of Impact LU-2.

Mitigation Framework

Please refer to Mitigation Framework LU-2.

11.3.6 Wetlands

Impact

Impacts to wetlands and other jurisdictional water resources would be significant.

Mitigation Framework

BIO-4: To reduce potential direct impacts to City, state, and federally regulated wetlands, all subsequent projects developed in accordance with the CPU shall be required to comply with

USACE Clean Water Act Section 404 requirements and special conditions, CDFW Section 1602 Streambed Alteration Agreement requirements and special conditions, and the City of San Diego ESL Regulations for minimizing impacts to wetlands. Achieving consistency with these regulations for impacts on wetlands and special aquatic sites would reduce potential impacts to regulated wetlands and provide compensatory mitigation (as required) to ensure no net-loss of wetland habitats.

Prior to obtaining discretionary permits for future actions implemented in accordance with the CPU, a site-specific biological resources survey shall be completed in accordance with City of San Diego Biology Guidelines. Any required mitigation for impacts shall be outlined in a conceptual wetland mitigation plan prepared in accordance with the City's Biology Guidelines (2012a). In addition, a preliminary or final jurisdictional wetlands delineation of the project site shall be completed following the methods outlined in the USACE's 1987 *Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region*. A determination of the presence/absence and boundaries of any WoUS and WoS shall also be completed following the appropriate USACE guidance documents for determining the OHWM boundaries. The limits of any riparian habitats on-site under the sole jurisdiction of CDFW shall also be delineated, as well as any special aquatic sites (excluding vernal pools) that may not meet federal jurisdictional criteria but are regulated by California Coastal Commission and the RWQCB. Engineering design specifications based on project-level grading and site plans shall be incorporated into the project design to minimize direct impacts to wetlands, jurisdictional waters, riparian habitats, vernal pools, etc. consistent with federal, state, and City guidelines.

Additionally, any impacts to wetlands in the City of San Diego would require a deviation from the ESL wetland regulations. Under the wetland deviation process, development proposals that have wetland impacts shall be considered only pursuant to one of three options; Essential Public Projects, Economic Viability Option, or Biologically Superior Option. ESL Regulations require that impacts to wetland be avoided. Unavoidable impacts to wetlands shall be minimized to the maximum extent practicable and mitigated as follows:

- As part of the project-specific environmental review pursuant to CEQA, all unavoidable wetland impacts shall be analyzed, and mitigation shall be required in accordance with ratios shown in Tables 5.4-8a and b below. Mitigation shall be based on the impacted type of wetland and project design. Mitigation shall prevent any net loss of wetland functions and values of the impacted wetland.
- For the Biologically Superior Option, the project and proposed mitigation shall include avoidance, minimization, and compensatory measures, which would result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved. The Biologically Superior Option mitigation shall include either (1) standard mitigation per Table 5.4-8a, including wetland creation or restoration of the same type of wetland resource that is being impacted that results in high quality wetlands; and a biologically

superior project design whose avoided area(s) (i) is in a configuration or alignment that optimizes the potential long-term biological viability of the on-site sensitive biological resources, and/or (ii) conserves the rarest and highest quality on-site biological resources; or (2) for a project not considered consistent with “1” above, extraordinary mitigation per Table 5.4-8b is required.

TABLE 5.4-8a
CITY OF SAN DIEGO WETLAND MITIGATION RATIOS
(With Biologically Superior Design)

Vegetation Community	Mitigation Ratio
Riparian	2:1 to 3:1
Vernal pool*	2:1 to 4:1
Basin with fairy shrimp*	2:1 to 4:1
Freshwater marsh	2:1

*The City currently does not have take authority for vernal pools. A draft vernal pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies. If adopted, the City would have “take” authority for the vernal pool species occurring within the vernal pool HCP areas.

TABLE 5.4-8b
CITY OF SAN DIEGO WETLAND MITIGATION RATIOS
(Without Biologically Superior Design)

Vegetation Community	Mitigation Ratio
Riparian	4:1 to 6:1
Vernal pool*	4:1 to 8:1
Basin with fairy shrimp*	4:1 to 8:1
Freshwater marsh	4:1

*The City currently does not have take authority for vernal pools. A draft vernal pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies. If adopted, the City would have “take” authority for the vernal pool species occurring within the vernal pool HCP areas.

As part of any future project-specific environmental review pursuant to CEQA, all unavoidable wetlands impacts (both temporary and permanent) shall be analyzed and mitigation required in accordance with Table 3.3-4 of the City Biology Guidelines; mitigation shall be based on the impacted type of wetland habitat. Mitigation shall prevent any net loss of wetland functions and values of the impacted wetland. The following provides operational definitions of the four types of activities that constitute wetland mitigation under the ESL Regulations:

- **Wetland creation** is an activity that results in the formation of new wetlands in an upland area. An example is excavation of uplands adjacent to existing wetlands and the establishment of native wetland vegetation.

- **Wetland restoration** is an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.
- **Wetland enhancement** is an activity that improves the self-sustaining habitat functions of an existing wetland. An example is removal of exotic species from existing riparian habitat.
- **Wetland acquisition** may be considered in combination with any of the three mitigation activities above.

Wetland enhancement and wetland acquisition focus on the preservation or the improvement of existing wetland habitat and function and do not result in an increase in wetland area; therefore, a net loss of wetland may result. As such, acquisition and/or enhancement of existing wetlands shall be considered as partial mitigation only for any balance of the remaining mitigation requirement after restoration or creation if wetland acreage is provided at a minimum of a 1:1 ratio.

For permanent wetland impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new in-kind habitat to the fullest extent possible and at the appropriate ratios. If on-site mitigation is not feasible, then at least a portion of the mitigation must occur within the same watershed. The City's Biology Guidelines and MSCP Subarea Plan require that impacts on wetlands, including vernal pools, shall be avoided, and that a sufficient wetland buffer shall be maintained, as appropriate, to protect resource functions/values. The project specific biology report shall include an analysis of on-site wetlands (including City, state, and federal jurisdiction analysis) and, if present, include project alternatives that fully/substantially avoid wetland impacts. Detailed evidence supporting why there is no feasible less environmentally damaging location or alternative to avoid any impacts must be provided for City staff review, as well as a mitigation plan that specifically identifies how the project is to compensate for any unavoidable impacts. A conceptual wetland mitigation plan (which includes identification of the mitigation site) shall be approved by City staff prior to the release of the draft environmental document. Avoidance shall be the first requirement; mitigation shall only be used for impacts clearly demonstrated to be unavoidable.

Prior to the commencement of any construction-related activities on-site for projects impacting wetland habitat (including earthwork and fencing) the applicant shall provide evidence of the following to the Assistant Deputy Director (ADD)/Environmental Designee prior to any construction activity:

- Compliance with USACE Section 404 nationwide permit;
- Compliance with the RWQCB Section 401 Water Quality Certification; and
- Compliance with the CDFW Section 1601/1603 Streambed Alteration Agreement.

Vernal Pools and Vernal Pool Species

Impacts to vernal pools shall require assessments of vernal pool flora and fauna, hydrology, habitat function, and restoration potential and protocol fairy shrimp surveys, in addition to the requirements listed above. Impacts to fairy shrimp shall require either a section 10(a)1(A) permit or Section 7 consultation Biological Opinion from USFWS. If the vernal pool HCP is adopted, the City will receive take authorization for the seven vernal pool species.

Mitigation for projects impacting vernal pools shall include salvage of sensitive species from vernal pools to be impacted, introduction of salvaged material into restored vernal pool habitat where appropriate (e.g., same pool series) and maintenance of salvaged material pending successful restoration of the vernal pools. Salvaged material shall not be introduced to existing vernal pools containing the same species outside the vernal pool series absent consultation with and endorsement by vernal pool species experts not associated with the project (e.g., independent expert). The mitigation sites shall include preservation of the entire watershed and a buffer based on functions and values; however, if such an analysis is not conducted, there shall be a default of a 100-foot buffer from the watershed.

11.3.7 Noise Generation

Impact

There is a potential for temporary noise impacts to wildlife from construction and permanent noise impacts from the introduction of noise generating land uses adjacent to MHPA. Temporary and/or permanent noise impacts to wildlife within the MHPA would be significant.

Mitigation Framework

Mitigation for impacts to sensitive wildlife species (including temporary and permanent noise impacts) resulting from future projects implemented in accordance with the CPU are included in Sections 5.1.6.3 (Land Use) and 5.4.4.3 (Biological Resources). Please refer to Mitigation Framework BIO-1 through BIO-4 and LU-2 (MHPA Land Use Adjacency Guidelines).

11.4 Historical Resources

11.4.1 Prehistoric or Historical Impacts

a. Archaeological Resources

Impact

Due to the number and density of prehistoric and historical resources in the CPU area, future development has the potential to result in the loss of resources, which would be a significant impact at the program level.

Mitigation Framework

HIST-1: Prior to issuance of any permit for a future development project implemented in accordance with the CPU area that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socio-economic and ethnic backgrounds. Sites may also include resources associated with pre-historic Native American activities.

INITIAL DETERMINATION

The environmental analyst will determine the likelihood for the project site to contain historical resources by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City Guidelines would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

STEP 1:

Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections should

11.0 Mitigation Monitoring and Reporting Program

also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information would be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist.

STEP 2:

Once a historical resource has been identified, a significance determination must be made. It should be noted that tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.

The results from the testing program will be evaluated against the Significance Thresholds found in the Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is

required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

STEP 3:

Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

STEP 4:

Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

11.0 Mitigation Monitoring and Reporting Program

Specific types of historical resource reports are required to document the methods (see Section III of the Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

STEP 5:

For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be

included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the Guidelines.

b. Historic Buildings, Structures, and Objects

Impact

Due to the number and density of prehistoric and historical resources in the CPU area, future development has the potential to result in the loss of resources, which would be a significant impact at the program level.

Mitigation Framework

HIST-2: Prior to issuance of any permit for a future development project implemented in accordance with the CPU that would directly or indirectly affect a building/structure in excess of 45 years of age, the City shall determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as: age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in the Historical Resources Guidelines.

Preferred mitigation for historic buildings or structures shall be to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource shall be taken. Depending upon project impacts, measures shall include, but are not limited to:

- a. Preparing a historic resource management plan;
- b. Designing new construction which is compatible in size, scale, materials, color and workmanship to the historic resource (such additions, whether portions of existing buildings or additions to historic districts, shall be clearly distinguishable from historic fabric);
- c. Repairing damage according to the Secretary of the Interior's Standards for Rehabilitation;
- d. Screening incompatible new construction from view through the use of berms, walls, and landscaping in keeping with the historic period and character of the resource;
- e. Shielding historic properties from noise generators through the use of sound walls, double glazing, and air conditioning; and
- f. Removing industrial pollution at the source of production.

Specific types of historical resource reports, outlined in Section III of the HRG, are required to document the methods to be used to determine the presence or absence of historical resources, to identify potential impacts from a proposed project, and to evaluate the significance of any historical resources identified. If potentially significant impacts to an identified historical resource are identified these reports will also recommend appropriate mitigation to reduce the impacts to below a level of significance. If required, mitigation programs can also be included in the report.

11.4.2 Religious or Sacred Uses

Impact

Please refer to significance of Issue 1.

Mitigation Framework

The Mitigation Framework religious or sacred uses (Issue 2) would be the same as outlined for Issue 1 - Archaeological Resources. Please refer to Mitigation Framework HIST-1.

11.4.3 Human Remains

Impact

Impacts to known resources and those not yet found and formally recorded could occur anywhere within the CPU. Future grading of original in situ soils could also expose buried human remains. Potential impacts to historical resources associated with construction of projects implemented in accordance with CPU would be considered significant (refer to Issue 1).

Mitigation Framework

The Mitigation Framework for human remains (Issue 3) would be the same as outlined for Issue 1 - Archaeological Resources. Please refer to Mitigation Framework HIST-1.

11.5 Human Health/Public Safety/Hazardous Materials

11.5.1 Health and Safety Hazards

11.5.1.1 Heath Hazards

Impact

Please refer to Section 5.3, Air Quality and Sections 5.6.4 and 5.6.5 for a discussion of exposure to health hazards. As indicated in those sections, hazardous sites have been identified that could result in significant impacts to future development within the CPU area.

Mitigation Framework

Please refer to mitigation frameworks AQ-3, AQ-4 and HAZ-3.

11.5.1.2 Wildfire Hazards

Impact

Existing policies and regulations would help reduce, but not completely abate, the potential risks of wildland fires. The General Plan and CPU contain goals and policies to be implemented by the City's Fire-Rescue Department and through land use compatibility, training, sustainable development, and other measures, these goals and policies are aimed at reducing the risk of wildland fires.

Continued monitoring and updating of existing development regulations and plans also would assist in creating defensible spaces and reduce the threat of wildfires. Public education, firefighter training, and emergency operations efforts would reduce the potential impacts associated with wildfire hazards.

Additionally, future development would be subject to conditions of approval that require adherence to the City's Brush Management Regulations and requirements of the California Fire Code.

However, because of the existing and proposed land use patterns around which the community is formed, new development in the wildland interface areas may expose additional people and structures to wildland fire hazards, representing a potentially significant impact. Therefore, impacts associated with wildfires would be significant at the program-level.

Mitigation Framework

HAZ-1: Future projects implemented in accordance with the CPU shall be required to incorporate sustainable development and other measures into site plans in accordance with the City's Brush Management Regulations, and Landscape Standards pursuant to General Plan and CPU policies intended to reduce the risk of wildfires. In addition, all future projects shall be reviewed for compliance with the 2010 California Fire Code, Section 145.07 of the LDC, and Chapter 7 of the California Building Code.

11.5.1.3 Aircraft Hazards

Impact

Implementation of the General Plan and CPU policies that address land use compatibility would support the development of future uses consistent with the adopted ALUCP. This would preclude any health and safety issues associated with off-airport aircraft accidents. Future discretionary projects within the CPU area, located within the AIA for Brown Field, would be submitted to the ALUC for a consistency determination. However, future projects could conflict with the Federal Aviation Administration (FAA) requirements unless the City implements a mechanism to ensure either the project would not include features identified in Part 77 criteria for notification or the project obtains a No Hazard to Air Navigation from the FAA. Thus, potential aircraft hazards impacts would be potentially significant.

Mitigation Framework

HAZ-2: To prevent the development of structures that may pose a hazard to air navigation, the City shall inform project applicants for future development concerning the existence of the Part 77 imaginary surfaces and Terminal Instrument Procedures and FAA requirements. The City shall also inform project applicants when proposed projects meet the Part 77 criteria for notification to the FAA as identified in City of San Diego Development Services Department Information Bulletin 520. The City shall not approve ministerial projects that require FAA notification without a FAA determination of "No Hazard to Air Navigation" for the project. Also, the City shall not recommend approval for discretionary projects that require FAA notification without a FAA determination of "No Hazard to Air Navigation" for the project until the project can fulfill state and ALUC requirements.

11.5.2 Hazardous Sites

Impact

The presence of sites compiled pursuant to Government Code Section 65962.5, along with any unknown hazardous sites, would have potentially significant impacts on future development and land uses within the CPU area.

Mitigation Framework

HAZ-3:

- a. A Phase I Site Assessment shall be completed in accordance with federal, state, and local regulations for any property identified on a list compiled pursuant to Government Code Section 65962.5. The report shall include an existing condition survey, detailed project description, and specific measures proposed to preclude upset conditions (accidents) from occurring. If hazardous materials are identified, a Phase II risk assessment and remediation effort shall be conducted in conformance with federal, state, and local regulations.
- b. The applicant shall retain a qualified environmental engineer to develop a soil and groundwater management plan to address the notification, monitoring, sampling, testing, handling, storage, and disposal of contaminated media or substances (soil, groundwater). The qualified environmental consultant shall monitor excavations and grading activities in accordance with the plan. The groundwater management and monitoring plans shall be approved by the City prior to development of the site.
- c. The applicant shall submit documentation showing that contaminated soil and/or groundwater on proposed development parcels have been avoided or remediated to meet cleanup requirements established by the local regulatory agencies (RWQCB/DTSC/DEH) based on the future planned land use of the specific area within the boundaries of the site (i.e., commercial, residential), and that the risk to human health of future occupants of these areas therefore has been reduced to below a level of significance.
- d. The applicant shall obtain written authorization from the regulatory agency (RWQCB/DTSC/DEH) confirming the completion of remediation. A copy of the authorization shall be submitted to the City to confirm that all appropriate remediation has been completed and that the proposed development parcel has been cleaned up to the satisfaction of the regulatory agency. In the situation where previous contamination has occurred on a site that has a previously closed case or on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the DEH shall be notified of the proposed land use.
- e. All cleanup activities shall be performed in accordance with all applicable federal, state, and local laws and regulations, and required permits shall be secured prior to commencement of construction to the satisfaction of the City and compliance with applicable regulatory agencies such as but not limited to San Diego Municipal Code Section 42.0801, Division 9 and Section 54.0701.

11.6 Hydrology/Water Quality

11.6.1 Runoff

Impact

Buildout in accordance with the CPU would result in an increase in impervious surfaces and associated increased runoff, and result in alterations to on- and off-site drainage. Therefore, implementation of the CPU has the potential to result in significant direct and indirect impacts associated with runoff and alternations to on- and off-site drainage patterns.

Mitigation Framework

HYD/WQ-1: Prior to approval of development projects implemented under the CPU, the applicant shall demonstrate to the satisfaction of the City Engineer, based on the project application, that future projects are sited and designed to minimize impacts on absorption rates, drainage patterns, and surface runoff rates and floodwaters in accordance with current City and RWQCB regulations identified below. Future design of projects shall incorporate feasible mitigation measures outlined below in accordance with the RWQCB, the City Storm Water Runoff and Drainage Regulations (Chapter 14, Article 2, Division 2 of the LDC), and the LDC, and shall be based on the recommendations of a detailed hydraulic analysis.

a. San Diego RWQCB

- Comply with all NPDES permit(s) requirements, including the development of a SWPPP if the disturbed soil area is one acre or more, or a Water Quality Control Plan if less than one acre, in accordance with the City's Storm Water Standards.
- If a future project includes in-water work, it shall require acquiring and adhering to a 404 Permit (from USACE) and a Streambed Alteration Agreement (from CDFW).
- Comply with the San Diego RWQCB water quality objectives and bacteria TMDL.

b. City of San Diego

- To prevent flooding, future projects shall be designed to incorporate any applicable measures from the City of San Diego LDC. Flood control measures that shall be incorporated into future projects within a SFHA, or within a 100-year floodway, include but are not limited to the following:
- Prior to issuance of building permits or approval of any project within or in the vicinity of a floodway or SFHA, all proposed development within a SFHA is subject to the following

requirements and all other applicable requirements and regulations of FEMA and those provided in Chapter 14, Article 3, Division 1 of the LDC.

- In all floodways, any encroachment, including fill, new construction, significant modifications, and other development, is prohibited unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge except as allowed under Code of Federal Regulations Title 44, Chapter 1, Part 60.3(c) (13).
- If the engineering analysis shows that development will alter the floodway or floodplain boundaries of the Special Flood Hazard Area, the developer shall obtain a Conditional Letter of Map Revision from FEMA.
- Fill placed in the Special Flood Hazard Area for the purpose of creating a building pad shall be compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test Fill method issued by the American Society for Testing and Materials (ASTM) Granular fill slopes shall have adequate protection for a minimum flood water velocity of five feet per second.
- The applicant shall denote on the improvement plans "Subject to Inundation" all areas lower than the base elevation plus two feet.
- If the structures will be elevated on fill such that the lowest adjacent grade is at or above the base flood elevation, the applicant must obtain a Letter of Map Revision based on Fill (LOMR-F) prior to occupancy of the building. The developer or applicant shall provide all documentation, engineering calculations, and fees required by FEMA to process and approve the LOMR-F.
- In accordance with Chapter 14, Article 3, Division 1 of the LDC channelization or other substantial alteration of rivers or streams shall be limited to essential public service projects, flood control projects, or projects where the primary function is the improvement of fish and wildlife habitat. The channel shall be designed to ensure that the following occur:
 - Stream scour is minimized.
 - Erosion protection is provided.
 - Water flow velocities are maintained as specified by the City Engineer.
 - There are neither significant increases nor contributions to downstream bank erosion and sedimentation of sensitive biological resources; acceptable techniques to control stream sediment include planting riparian vegetation in and near the stream and detention or retention basins.

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- Wildlife habitat and corridors are maintained.
- Groundwater recharge capability is maintained or improved.
- Within the flood fringe of a SFHA or floodway, permanent structures and fill for permanent structures, roads, and other development are allowed only if the following conditions are met:
 - The development or fill shall not significantly adversely affect existing sensitive biological resources on-site or off site.
 - The development is capable of withstanding flooding and does not require or cause the construction of off-site flood protective works including artificial flood channels, revetments, and levees nor shall it cause adverse impacts related to flooding of properties located upstream or downstream, nor shall it increase or expand a FIRM Zone A.
 - Grading and filling are limited to the minim amount necessary to accommodate the proposed development, harm to the environmental values of the floodplain is minimized including peak flow storage capacity, and wetlands hydrology is maintained.
 - The development neither significantly increases nor contributes to downstream bank erosion and sedimentation nor causes an increase in flood flow velocities or volume.
 - There shall be no significant adverse water quality impacts to downstream wetlands, lagoons, or other sensitive biological resources, and the development is in compliance with the requirements and regulations of the NPDES as implemented by the City of San Diego.

11.6.2 Natural Drainage System

Impact

Buildout in accordance with the CPU has the potential to result in a substantial change to stream flow velocities and drainage patterns on downstream properties. Therefore, implementation of the CPU has the potential to result in significant direct and indirect impacts to the natural drainage system.

Mitigation Framework

See **HYD/WQ-1** in Section 5.7.3.3, Mitigation Framework.

11.6.3 Flow Alteration

Impact

Future development within the CPU area would potentially impact the existing course and flow of flood waters, resulting in potentially significant impacts.

Mitigation Framework

See **HYD/WQ-1** in Section 5.7.3.3, Mitigation Framework.

11.6.4 Water Quality

Impact

Adherence to federal, state, and local regulations, would serve to reduce significant impacts to a degree, but cannot guarantee that all future project-level impacts would be avoided or mitigated to below a level of significance. Therefore, impacts associated with water quality would be significant at the program-level.

Mitigation Framework

HYD/WQ-2: Future projects shall be sited and designed to minimize impacts on receiving waters, in particular the discharge of identified pollutants to an already impaired water body. Prior to approval of any entitlements for any future project, the City shall ensure that any impacts on receiving waters shall be precluded and, if necessary, mitigated in accordance with the requirements of the City's Storm Water Runoff and Drainage Regulations (Chapter 14, Article 2, Division 2 of the LDC) and other appropriate agencies (e.g., RWQCB). To prevent erosion, siltation, and transport of urban pollutants, all future projects shall be designed to incorporate any applicable storm water improvement, both off- and on-site, in accordance with the City of San Diego Stormwater Standards Manual.

Storm water improvements and water quality protection measures that shall be required of future projects include:

- Increasing onsite filtration;
- Preserving, restoring, or incorporating natural drainage systems into site design;
- Directing concentrated flows away from MHPA and open space areas. If not possible, drainage shall be directed into sediment basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA or open space areas;
- Reducing the amount of impervious surfaces through selection of materials, site planning, and narrowing of street widths where possible;

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- Increasing the use of vegetation in drainage design;
- Maintaining landscape design standards that minimize the use of pesticides and herbicides; and
- To the extent feasible, avoiding development of areas particularly susceptible to erosion and sediment loss.

San Diego Regional Water Quality Control Board and Municipal Code Compliance

- The requirements of the RWQCB for storm water quality are addressed by the City in accordance with the City NPDES requirements and the participation in the regional permit with the RWQCB.
- Prior to permit approval, the City shall ensure any impacts on receiving waters are precluded or mitigated in accordance with the City of San Diego Stormwater Regulations.
- In accordance with the City of San Diego Stormwater Standards Manual, development shall be designed to incorporate on-site storm water improvements satisfactory to the City Engineer and shall be based on the adequacy of downstream storm water conveyance.

11.7 Geology/Soils

11.7.1 Geologic Hazards

Impact

The CPU area contains geologic conditions which would pose significant risks for future development if not properly addressed at the project-level. Unstable conditions relating to compressible soils, landslides, seismicity (faults), and expansive soils represent a potentially significant impact for future development.

Mitigation Framework

GEO-1: Impacts associated with geologic hazards shall be mitigated at the project-level through adherence to the City's Seismic Safety Study and recommendations of a site-specific geotechnical report prepared in accordance with the City's Geotechnical Report Guidelines. Impacts shall also be avoided or reduced through engineering design that meets or exceeds adherence to the City's Municipal Code and the California Building Code.

More specifically, compressible soils impacts shall be mitigated through the removal of undocumented fill, colluvium/topsoil, and alluvium to firm the ground. Future development

shall also be required to clean up deleterious material and properly moisture, condition, and compact the soil in order to provide suitable foundation support.

Regarding impacts related to expansive soils, future development shall be required to implement typical remediation measures, which shall include placing a minimum 5-foot cap of low expansive (Expansion Index [EI] of 50 or less) over the clays; or design of foundations and surface improvements to account for expansive soil movement.

11.7.2 Erosion

Impact

Based on the steep nature of many of the hillsides and the generally poorly consolidated nature of the sedimentary materials and soils found throughout the CPU area, erosion would represent a potentially significant impact, particularly in conjunction with some portions of the San Diego Formation and in drainages and stream valleys.

Mitigation Framework

GEO-2: As part of the future development permitting process, the City shall require individual projects to adhere to the Grading Regulation and NPDES permit requirements. All subsequent projects developed in accordance with the CPU shall also adhere to the California Building Code to avoid or reduce geologic hazards to the satisfaction of the City Engineer.

Submittal, review and approval of site specific geotechnical investigations shall be completed in accordance with the City's Municipal Code requirements. Engineering design specifications based on future project-level grading and site plans shall be incorporated into all future projects implemented in accordance with the CPU to minimize hazards associated with site-level geologic and seismic conditions satisfactory to the City Engineer and shall include the following measures to control erosion during and after grading or construction:

- Desilting basins, improved surface drainage, or planting of ground covers installed early in the improvement process in areas that have been stripped of native vegetation or areas of fill material;
- Short-term measures, such as sandbag placement and temporary detention basins;
- Restrictions on grading during the rainy season (November through March), depending on the size of the grading operation, and on grading in proximity to sensitive wildlife habitat; and
- Immediate post-grading slope revegetation or hydroseeding with erosion-resistant species to ensure coverage of the slopes prior to the next rainy season.

11.0 Mitigation Monitoring and Reporting Program

Conformance to mandated City grading requirements shall ensure that future grading and construction operations would avoid significant soil erosion impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres, or any project involving less than one acre that is part of a larger development plan, shall be subject to NPDES General Construction Storm Water Permit provisions. Additionally, any development of this significant size within the City shall be required to prepare and comply with an approved SWPPP that shall consider the full range of erosion control BMPs such as, but not limited to, including any additional site-specific and seasonal conditions. Project compliance with NPDES requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development.

Prior to obtaining grading permits for future actions a site-specific geotechnical investigation shall be completed as necessary in accordance with the City of San Diego Guidelines for Preparing Geotechnical Reports. Engineering design specifications based on project-level grading and site plans shall be incorporated into the project design to minimize hazards associated with site-level geologic and seismic conditions satisfactory to the City Engineer. Measures designed to reduce erosion at the project-level shall include the following:

- Control erosion by minimizing the area of slope disturbance and coordinate the timing of grading, resurfacing, and landscaping where disturbance does occur.
- On sites for industrial activities require reclamation plans that control erosion, where feasible, in accordance with the LDC.
- Control erosion caused by storm runoff and other water sources.
- Preserve as open space those hillsides characterized by steep slopes or geological instability in order to control urban form, insure public safety, provide aesthetic enjoyment, and protect biological resources.
- Replant with native, drought-resistant plants to restore natural appearance and prevent erosion.
- Practice erosion control techniques when grading or preparing building sites.
- Utilize ground cover vegetation when landscaping a development in a drainage area to help control runoff.
- Incorporate sedimentation ponds as part of any flood control or runoff control facility.
- During construction, take measures to control runoff from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms, or lines of straw bales are a few of the techniques to consider.

- Phase grading so that prompt revegetation or construction can control erosion. Only disturb those areas that will later be resurfaced, landscaped, or built on. Resurface parking lots and roadways as soon as possible, without waiting until completion of construction.
- Promptly revegetate graded slopes with groundcover or a combination of groundcover, shrubs, and trees. Hydroseeding may substitute for container plantings. Groundcovers shall have moderate to high erosion control qualities.
- Where necessary, design drainage facilities to ensure adequate protection for the community while minimizing erosion and other adverse effects of storm runoff to the natural topography and open space areas.
- Ensure that the timing and method of slope preparation protects natural areas from disturbance due to erosion or trampling. The final surface shall be compacted and spillovers into natural areas shall be avoided.
- Plant and maintain natural groundcover on all created slopes.

When required, the geologic technical report shall consist of a preliminary study, a geologic reconnaissance, or an in-depth geologic investigation report that includes field work and analysis. The geologic reconnaissance report and the geologic investigation report shall include all pertinent requirements as established by the Building Official.

In addition, the Building Official shall require a geologic reconnaissance report or a geologic investigation report for any site if the Building Official has reason to believe that a geologic hazard may exist at the site.

Section 145.1802 of the San Diego Municipal Code discusses in more detail the requirements related to the geotechnical report outlined in the SDSSS (City of San Diego 2009).

11.8 Noise

11.8.1 Traffic Generated Noise Impacts

Impact

Based on the noise analysis, exterior and potentially interior traffic noise impacts are anticipated at the majority of locations adjacent to I-805, SR-905, SR-125, Otay Mesa Road, and Airway Road (see Figure 5.10-3). While the regulatory framework would provide for the maximum practical noise abatement that would be implemented at the project-level, because of the variability of noise sources and the proximity to existing and potential noise

sources in the CPU area, it cannot be guaranteed that future land uses would not expose existing uses to noise levels in excess of City standards. Therefore, impacts related to traffic noise impacts to new residences would be significant.

Mitigation Framework

NOI-1: Prior to the issuance of building permits, site-specific exterior noise analyses that demonstrate that the project would not place residential receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility standards of the City's General Plan shall be required as part of the review of future residential development proposals. Noise reduction measures, including but not limited to building noise barriers, increased building setbacks, speed reductions on surrounding roadways, alternative pavement surfaces, or other relevant noise attenuation measures, may be used to achieve the noise compatibility standards. Exact noise mitigation measures and their effectiveness shall be determined by the site-specific exterior noise analyses.

Impact

There are areas within the CPU area where project traffic noise would potentially cause interior noise levels in existing residences to exceed applicable standards. As these may be older residences, which would not have been constructed to achieve current interior noise standards, there is the potential that project traffic may generate noise levels that exceed current standards at these existing residences. This is a potentially significant impact of the CPU.

Mitigation Framework

NOI-2: When building plans are available and prior to the issuance of building permits, site specific interior noise analyses demonstrating compliance with the interior noise compatibility standards of the City's General Plan and other applicable regulations shall be prepared for noise sensitive land uses located in areas where the exterior noise levels exceed the noise compatibility standards of the City's General Plan. Noise control measures, including but not limited to increasing roof, wall, window, and door sound attenuation ratings, placing HVAC in noise reducing enclosures, or designing buildings so that no windows face freeways or major roadways may be used to achieve the noise compatibility standards. Exact noise mitigation measures and their effectiveness shall be determined by the site specific exterior noise analyses.

11.8.2 Stationary Source Noise (Collocation)

Impact

As discussed above, the CPU has the potential to site noise-sensitive uses (i.e., residential) adjacent to noise-generating commercial and industrial uses. The juxtaposition of these land

uses would result in potentially significant noise impacts. While the framework of federal, state, and local regulations and policies would reduce direct and indirect impacts associated with the generation of noise levels in excess of standards established in the General Plan or Noise Abatement and Control Ordinance, no project-level site plans or implementation programs have been considered as part of this PEIR. Without detailed operational data it cannot be verified that compliance with existing regulations would reduce all impacts to below a level of significance. As the degree of success of regulations cannot be adequately known for each project at this program-level of analysis, the program-level impact related to noise from stationary sources would be significant.

Mitigation Framework

NOI-3: Prior to the issuance of a building permit, a site-specific acoustical/noise analysis of any on-site generated noise sources, including generators, mechanical equipment, and trucks, shall be prepared which identifies all noise-generating equipment, predicts noise levels at property lines from all identified equipment, and recommends mitigation to be implemented (e.g., enclosures, barriers, site orientation), to ensure compliance with the City's Noise Abatement and Control Ordinance. Noise reduction measures shall include building noise-attenuating walls, reducing noise at the source by requiring quieter machinery or limiting the hours of operation, or other attenuation measures. Additionally, future projects shall be required to buffer sensitive receptors from noise sources through the use of open space and other separation techniques as recommended after thorough analysis by a qualified acoustical engineer. Exact noise mitigation measures and their effectiveness shall be determined by the site specific noise analyses.

11.8.3 Construction Noise

Impact

As discussed above, the CPU has the potential to exceed applicable construction thresholds at residential properties adjacent to construction sites.

Additionally, there is the potential for construction noise to impact least Bell's vireo, coastal California gnatcatcher, raptors, and other sensitive species if they are breeding or nesting in adjacent MHPA lands. These impacts are significant at the program-level.

Mitigation Framework

NOI-4: For projects that exceed daily construction noise thresholds established by the City of San Diego, best construction management practices shall be used to reduce construction noise levels to comply with standards established by the Municipal Code in Chapter 5, Article 9.5, Noise Abatement and Control. Project applicant shall prepare and implement a Construction Noise Management Plan. Appropriate management practices shall be

determined on a project-by-project basis, and are specific to the location. Control measures shall include:

- a. Minimizing simultaneous operation of multiple construction equipment units;
- b. Locating stationary equipment as far as reasonable from sensitive receptors;
- c. Requiring all internal combustion-engine-driven equipment to be equipped with mufflers that are in good operating condition and appropriate for the equipment; and
- d. Construction of temporary noise barriers around construction sites that block the line-of-sight to surrounding receptors.

The MHPA Land Use Adjacency Guidelines in the MSCP Subarea Plan address noise impacts associated with industrial, commercial, mixed-use, or recreation uses that generate stationary noise adjacent to MHPA areas and are specifically detailed in Mitigation Framework LU-2 in Section 5.1. Additional construction-related noise measures are identified in Section 5.4, Biological Resources.

11.9 Paleontological Resources

Impact

Implementation of the CPU has the potential to result in significant impacts to paleontological resources. Grading would exceed the depth and volume indicated in Table 5.11-1. As such, CPU implementation would result in grading that would impact fossil resources relevant to understanding earth's history, if the fossils are not recovered and salvaged. Specifically, future projects implemented in accordance with the CPU that would involve substantial grading within the San Diego and Otay formations and Very Old Paralac Deposits that would result in the loss of significant fossil remains. It should be noted however, that for future projects that are consistent with the OMCP, base zone regulations and the supplemental regulations for CPIOZ Type A and can demonstrate that no paleontological fossil resources are present; the project can be processed ministerially and would not be subject to further environmental review under CEQA.

**TABLE 5.11-1
PALEONTOLOGICAL SIGNIFICANCE THRESHOLDS**

Sensitivity Rating	Excavation Volume and Depth Thresholds
High	>1,000 cubic yards and >10 feet deep
Moderate	>2,000 cubic yards and >10 feet deep
Low-Zero	Mitigation not required

Mitigation Framework

PALEO-1: Prior to the approval of development projects implemented in accordance with the CPU, the City shall determine, based on review of the project application submitted under CPIOZ TYPE B and recommendations of a project-level analysis of potential impacts on paleontological resources completed in accordance with the steps presented below. Future projects shall be sited and designed to minimize impacts on paleontological resources in accordance with the City's Paleontological Resources Guidelines and CEQA Significance Thresholds. Monitoring for paleontological resources required during construction activities shall be implemented at the project-level and shall provide mitigation for the loss of important fossil remains with future discretionary projects that are subject to environmental review.

I. Prior to Project Approval

- A. The environmental analyst shall complete a project-level analysis of potential impacts on paleontological resources. The analysis shall include a review of the applicable USGS Quad maps to identify the underlying geologic formations, and shall determine if construction of a project would:
 - Require over 1,000 cubic yards of excavation and/or a 10-foot, or greater, depth in a high resource potential geologic deposit/formation/rock unit.
 - Require over 2,000 cubic yards of excavation and/or a 10-foot, or greater, depth in a moderate resource potential geologic deposit/formation/rock unit.
 - Require construction within a known fossil location or fossil recovery site. Resource potential within a formation is based on the Paleontological Monitoring Determination Matrix.
- B. If construction of a project would occur within a formation with a moderate to high resource potential, monitoring during construction would be required.
 - Monitoring is always required when grading on a fossil recovery site or a known fossil location.
 - Monitoring may also be needed at shallower depths if fossil resources are present or likely to be present after review of source materials or consultation with an expert in fossil resources (e.g., the San Diego Natural History Museum).
 - Monitoring may be required for shallow grading (<10 feet) when a site has previously been graded and/or unweathered geologic deposits/formations/rock units are present at the surface.

- Monitoring is not required when grading documented artificial fill. When it has been determined that a future project has the potential to impact a geologic formation with a high or moderate fossil sensitivity rating a Paleontological MMRP shall be implemented during construction grading activities.

11.10 Traffic/Circulation

11.10.1 Capacity

11.10.1.1 Roadway Segments

Impact

A total of 24 roadway segments under the Horizon Year Plus CPU condition would be expected to operate at unacceptable LOS. Therefore, the CPU would have a significant impact at all of these 24 roadway segment locations.

Mitigation Framework

Even with the proposed classifications, 24 roadway segments would operate unacceptably in the Horizon Year Plus CPU condition. The TIA identified additional potential improvement measures that are not recommended as part of the CPU and are not included as part of the project. The reasons for not recommending the improvements are detailed in the Findings and the Statement of Overriding Considerations. The impacts are considered significant and unavoidable. At the project-level, partial mitigation may be possible in the form of transportation demand management measures that encourage carpooling and other alternate means of transportation. At the time future discretionary development projects are proposed, project-specific traffic analyses would contain detailed recommendations. All project-specific mitigation for direct impacts shall be implemented prior to the issuance of Certificate of Occupancy in order to provide mitigation at the time of impact.

The 24 roadway segments that would operate unacceptably in the Horizon Year plus CPU Condition are listed below.

1. Otay Mesa Road, Caliente Ave. to Corporate Center Dr.
2. Otay Mesa Road, Heritage Rd. to Cactus Rd.
3. Airway Road, Caliente Ave. to Heritage Rd.
4. Airway Road, Heritage Rd. to Cactus Rd.
5. Siempre Viva Road, Otay Center Dr. to SR-905
6. Siempre Viva Road, SR-905 to Paseo de las Americas
7. Caliente Avenue, Airway Rd. to Beyer Blvd.
8. Caliente Avenue, Beyer Blvd. to Siempre Viva Rd.

9. Heritage Road/Otay Valley Road, Main St. to Avenida de Las Vistas
10. Heritage Road/Otay Valley Road, Avenida de las Vistas to Datsun St.
11. Cactus Road, Otay Mesa Rd. to Airway Rd.
12. Cactus Road, Airway Rd. to Siempre Viva Rd.
13. Britannia Boulevard, SR-905 to Airway Rd.
14. La Media Road, SR-905 to Airway Rd.
15. Dennery Road, Black Coral Ln. to East End
16. Avenida de las Vistas, Vista Santo Domingo to Dennery Rd.
17. Del Sol Boulevard, Surf Crest Dr. to Riviera Pointe
18. Del Sol Boulevard, Riviera Pointe to Dennery Rd.
19. Old Otay Mesa Road, Crescent Bay Dr. to Beyer Blvd.
20. Camino Maquiladora, Heritage Rd. to Pacific Rim Ct.
21. Camino Maquiladora, Pacific Rim Ct. to Cactus Rd.
22. Progressive Avenue, Corporate Center Dr. to Innovative Dr.
23. Datsun Street, Innovative Dr. to Heritage Rd.
24. Exposition Way/Vista Santo Domingo, Avenida de las Vistas to Corporate Center Dr.

11.10.1.2 Intersections

Impact

A total of 49 intersections would be expected to operate at unacceptable levels under the Horizon Year Plus CPU condition. Therefore, the CPU would have a significant impact at all 49 of these intersections.

Mitigation Framework

A total of 49 intersections would be significantly impacted by the CPU. With mitigation measures, a total of 39 intersections would continue to be significantly impacted. The TIA identified further potential improvement measures such as additional intersection turning movement lanes that are not recommended as part of the CPU and are not included as part of the project. The reasons for not recommending the improvements are detailed in the Findings and Statement of Overriding Considerations. At the project-level, partial mitigation may be possible in the form of transportation demand management measures that encourage carpooling and other alternate means of transportation. At the time future discretionary development projects are proposed, project-specific traffic analyses would contain detailed recommendations. All project-specific mitigation for direct impacts shall be implemented prior to the issuance of Certificate of Occupancy in order to provide mitigation at the time of impact.

The impacts are considered significant and unavoidable. To reduce impacts the following mitigation shall be provided:

TRF-1: Intersections shall be improved per the intersection lane designations identified in Figure 5.12-4.

11.10.1.3 Freeway Segments

Impact

With the planned and funded I-805 improvements, all I-805 freeway segments would be expected to operate at an acceptable LOS in the Horizon Year Plus CPU condition and therefore impacts would be less than significant. Five SR-905 freeway segments would be expected to operate at unacceptable levels in the Horizon Year Plus CPU condition. Thus, the CPU impact at these five SR-905 freeway segments would be significant.

Mitigation Framework

While providing one HOV lane in each direction on the SR-905 would reduce impacts associated with buildout of the CPU, the additional lanes are not funded; therefore, impacts would remain significant and unavoidable at the programmatic level. At the project-level, partial mitigation may be possible in the form of transportation demand management measures that encourage carpooling and other alternate means of transportation. At the time future discretionary development projects are proposed, project-specific traffic analyses would contain detailed recommendations. All project-specific mitigation for direct impacts shall be implemented prior to the issuance of Certificate of Occupancy in order to provide mitigation at the time of impact.

11.10.1.4 Freeway Ramp Metering

Impact

Five SR-905 freeway ramps would be expected to experience delays over 15 minutes with downstream freeway operations at unacceptable levels in the Horizon Year Plus CPU condition. The CPU impact at these five freeway ramps would be significant.

Mitigation Framework

Mitigation that would reduce freeway ramp metering impacts at the five significantly impacted SR-905 locations consists of adding a lane to the freeway on-ramp and implementation of transportation demand management (TDM) measures that encourage carpooling and other alternate means of transportation. At the time future discretionary development projects are proposed, project-specific traffic analyses would contain detailed recommendations. All project-specific mitigation for direct impacts shall be implemented prior to the issuance of Certificate of Occupancy in order to provide mitigation at the time of impact.

However, due to the uncertainty associated with implementing freeway ramp improvements, and uncertainty related to implementation of TDM measures, the freeway ramp impacts associated with the CPU would remain significant and unavoidable at the program-level.

11.11 Utilities

11.11.1 Solid Waste

Impact

The CPU would not result in the direct need for a new landfill. Compliance with the Storage, Recycling, and C&D ordinances and the requirement to prepare a WMP (in some instances) would contribute to the CPU meeting the state-mandated 75 percent diversion rate. However, because all future projects within the CPU area may not be required to prepare a WMP or may not reduce project-level waste management impacts to below a level of significance, the CPU cannot be guaranteed, at the program-level, to meet the 75 percent diversion requirement. Direct impacts associated with solid waste would be significant at the program-level.

Mitigation Framework

UTIL-1: Pursuant to the City's Significance Determination Thresholds, discretionary projects (including construction, demolition, and /or renovation) that would generate 60 tons or more of solid waste shall be required to prepare a Waste Management Plan (WMP). The WMP shall be prepared by the applicant, conceptually approved by the ESD and discussed in the environmental document. The WMP shall be implemented by the applicant and address the demolition, construction, and occupancy phases of the project as applicable to include the following:

- a. A timeline for each of the three main phases of the project (demolition, construction, and occupancy).
- b. Tons of waste anticipated to be generated (demolition, construction, and occupancy).
- c. Type of waste to be generated (demolition, construction, and occupancy).
- d. Describe how the project will reduce the generation of C&D debris.
- e. Describe how the C&D materials will be reused on-site.
- f. Include the name and location of recycling, reuse, and landfill facilities where recyclables and waste will be taken if not reused on-site.

11.0 Mitigation Monitoring and Reporting Program

- g. Describe how the C&D waste will be source separated if a mixed C&D facility is not used for recycling.
- h. Describe how the waste reduction and recycling goals will be communicated to subcontractors.
- i. Describe how a "buy recycled" program for green construction products, including mulch and compost, will be incorporated into the project.
- j. Describe how the Refuse and Recyclable Materials Storage Regulations (LDC Chapter 14, Article 2 Division 8) will be incorporated into design of building's waste storage area.
- k. Describe how compliance with the Recycling Ordinance (Municipal Code Chapter 6, Article 6, Division 7) will be incorporated in the operational phase.
- l. Describe any International Standards of Operation 1, or other certification, if any.

11.12 Greenhouse Gas Emissions

11.12.1 Consistency with Adopted Plans, Policies, and Regulations

Impact

The CPU contains policies that would reduce GHG emissions from transportation and operational building uses (related to water and energy consumption, and solid waste generation, etc.) and would be consistent with the strategies of local and state plans, policies, and regulations aimed at reducing GHG emissions from land use and development. Subsequent projects implemented in accordance with the CPU would be required to implement GHG-reducing features beyond those mandated under existing codes and regulations. However, because project-level details are not known, there is the potential that projects would not meet the necessary City reduction goals put in place in order to achieve the reductions required by AB 32. Thus, the level of potential impacts associated with plan conflict would be significant.

Mitigation Framework

GHG-1: Future projects implemented in accordance with the CPU shall be required to demonstrate their avoidance of significant impacts related to long-term GHG emissions. The Mobility, Urban Design, and Conservation elements of the CPU include specific policies to require dense, compact, and diverse development, encourage highly efficient energy and water conservation design, increase walkability and bicycle and transit accessibility, increase

urban forestry practices and community gardens, decrease urban heat islands, and increase climate-sensitive community design. These policies would serve to reduce consumption of fossil-fueled vehicles and energy resulting in a reduction in communitywide GHG emissions relative to BAU.

Future projects implemented in accordance with the CPU shall be required to incorporate GHG reducing features or mitigation measures in order to show a 28.3 percent reduction in GHG emissions, relative to BAU, to meet AB 32 year 2020 target levels. Quantifiable GHG reduction measures at the level of subsequent projects consist of:

- Building and non-building energy use
- Indoor and outdoor water use
- Area sources
- Solid waste disposal
- Vegetation/carbon sequestration
- Construction equipment
- Transportation/vehicles

11.12.2 Cumulative GHG Emissions

Impact

The 9.1 to 11.4 percent reductions relative to BAU fall short of meeting the City's goal of a minimum 28.3 percent reduction in GHG emissions relative to BAU, and therefore impacts associated with GHG emissions under the CPU would be significant and unavoidable.

The Mobility, Urban Design, and Conservation elements of the CPU include specific policies to require dense, compact, and diverse development, encourage highly efficient energy and water conservation design, increase walkability and bicycle and transit accessibility, increase urban forestry practices and community gardens, decrease urban heat islands, and increase climate-sensitive community design. These policies would serve to reduce consumption of fossil-fueled vehicles and energy resulting in a reduction in communitywide GHG emissions relative to BAU. These policies are discussed in detail in Section 5.18.3.

Despite the inclusion of these policies (most of which are not quantifiable in terms of their GHG emissions reductions at the program level), and despite the GHG reductions gleaned from statewide regulations on vehicle GHG emissions and building energy and water use, the CPU's projected GHG emissions would fall short of meeting the 28.3 percent GHG reduction target relative to 2020 BAU.

Mitigation Framework

GHG-2: Future projects implemented in accordance with the CPU shall be required to demonstrate their avoidance of significant impacts related to long-term operational emissions as identified in mitigation measure GHG-1 in Section 5.18.3.3.

The approximate gap of 16.9 to 19.2 percent in meeting the target reductions shall consist of one or a combination of several effective and quantifiable GHG reduction measures that pertain to: building and non-building energy use; indoor and outdoor water use; area sources; solid waste disposal; vegetation/carbon sequestration; construction equipment; and transportation/vehicles. Project-level GHG reduction design features shall demonstrate a reduction in BAU GHG emissions to 28.3 percent or more relative to BAU, and to the extent practicable, shall be required for future development projects implemented in accordance with the CPU.

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The following documents were used, referenced, or relied on in preparing this EIR, and the documents are available for public review and inspection at the City of San Diego. Some documents are additionally available for review on the City of San Diego website page at www.sandiego.gov.

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14.0 Certification

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